

**PERIODICAL  
GUIDE  
FOR  
COMPUTERISTS**

*An Index of Magazine Articles  
for Computer Hobbyists*

*January - December 1978*



PERIODICAL GUIDE FOR COMPUTERISTS 1978

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**LIST OF ABBREVIATIONS AND MAGAZINES INDEXED**

<b>ABBREVIATION</b>	<b>MAGAZINE</b>
Byte	Byte
CQ	CQ Amateur Radio
Calc. Comp.	Calculators / Computers
Comp. Dec.	Computer Decisions
Comp. Des.	Computer Design
Cr. Comput.	Creative Computing
Dig. Design	Digital Design
Dr. Dobbs	Dr. Dobbs Journal of Computer
EDN	EDN
Electronics	Electronics
Elec. Des.	Electronic Design
Elem. Elec.	Elementary Electronics
Ham Radio	Ham Radio
Interf. Age	Interface Age
Kilobaud	Kilobaud
Micro	Micro
Mini Micro	Mini Micro Systems
Modern Elec.	Modern Electronics
PCW	Personal Computer World
Peoples	Peoples Computer
Per. Comput.	Personal Computing
Pop. Elec.	Popular Electronics
QST	QST Amateur Radio
Radio Elec.	Radio Electronics
ROM	ROM
Spectrum	IEEE Spectrum
73	73 Amateur Radio

**MONTH ABBREVIATIONS**

A Number following the Month  
designates the day of issue.

Ja	January
F	February
Mr	March
Ap	April
My	May
Je	June
Jy	July
Ag	August
S	September
O	October
N	November
D	December

**TYPE OF LISTING**

- a Article
- b Book Review
- e Editorial
- l Letter from Reader

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**PERIODICAL GUIDE FOR COMPUTERISTS**

**JANUARY - DECEMBER 1978**

**AMATEUR RADIO**

Byte	N	p48	a	The Sky's the Limit; Using Ham Bands for Intercomputer Communication by Joe Kasser
Byte	N	p120	a	A Multiuser Data Network; Communicating Over VHF Radio by Robert E Bruninga
QO	Ap	p24	a	Selection of Contest Operators Using Biorythm Charts by Prof Emil Heisseluft
Electronics	N 9	p90	a	Communications: That boom you hear is ham radio by Vincent Biancomano
Elem. Elec.	S	p73	a	Microcomputers are causing a revolution in radio by Norman Meyers
Ham Radio	Ja	p81	a	Microprocessors: A uP Controlled CW Keyboard by James W Pollock
Ham Radio	F	p40	a	Satellite Tracking - Pointing & Range with a Pocket Calculator HP25 by John A Ball
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Ham Radio	My	p34	a	Antenna Bridge Calculations using Hand Held Calculator HP25 by Leonard H Anderson
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Ham Radio	S	p93	a	Digital Keyboard Entry System by Glenn Williman & Bruce McNair
Ham Radio	D	p38	a	The OSCAR Calcu-puter by Dave Brown
Interf. Age	O	p86	a	Computer Generated Morse Code by Jim McClure
Kilobaud	N	p34	a	World of the Brass Pounders: Receive Morse Code the Easy Way by Robert L Kurtz
Micro	Ap	p7	a	A Complete Morse Code Send/Receive Program for the KIM-1 by Marvin L DeJong
QST	Mr	p23	a	Locating Geosynchronous Satellites with help from a Pocket Calculator by Bill Johnston
QST	Ap	p45	a	His Computer Does the Operating by Charles J Harris
QST	O	p25	a	SSTV Pictures from Your Microcomputer by Barry Sanderson
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73	Ja	p92	a	Practical Computer Projects by Mickie
73	F	p68	a	KIM-1 Can Do It! by Clifton W Pittelkau
73	F	p82	a	Put An Elf In Your Keyer - sneaky computer strikes again by Jeff Duntemann
73	F	p84	a	Try HCAI - ham computer assisted instruction by Ed Hughot
73	Mr	p88	a	Solve Those Parallel Problems - HP-25 programs choose the values by Joseph M Fedock
73	Mr	p98	a	Programming Coil Design - at last a use for computers! by Al Gerbens
73	Ap	p88	a	At Last! A Use For Your Computer! - RTTY filter design program in BASIC by Dr John F Stewart
73	My	p92	a	Diary Of A Survivor - cyberosis victim tells all by Kenneth S Widelitz
73	Je	p108	a	Computerized Loop Antenna Design - in BASIC by William Slattery
73	Jy	p114	a	The 22S Programmer Program - diode selection in BASIC by Dave Lien & Dave Waterman
73	Ag	p108	a	The BASICs of L-Network Design - your micro makes it simple by Al Gerbens
73	S	p106	a	Computerized QSO Records - who needs a logbook? by Charles Zappala
73	O	p156	a	Bird Watching in BASIC Land - another use for your micro by Sam Creason
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73	N	p130	a	R-X Bridge + Calculator = VSWR antenna tuning without QRM by Wallace T Thompson
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Cr. Comput.	Jy	p48	a	The Telltale Heart: EKG Processing by Microcomputer by Farhad Forbes, Harry Garland & Takao Tsuiki

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 Electronics Ja5 p176 a Digital thermometer circumvents drift by Henry Wurzburg & Mike Hadley  
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 Electronics Mr2 p110 a Programmed module automates transducer's linearization by C Viswanath  
 Electronics N 23 p150 a Single-loop process controller adapts gain to operating level  
     by Frank Hermance & David Farwell

Ham Radio Mr p48 a Introduction to Operational Amplifiers by Donald W Nelson  
 Interf. Age Jy p68 a Interfacing A Microcomputer to the Analog World by Orv Balcom  
 Kilobaud F p72 a Interfacing Tips communicating with the outside world by Mark Boyd  
 Kilobaud Mr p110 a Temperature Sensing, some exciting possibilities! by John Bauernschub  
 Mini Micro Ag p60 a Microcomputers In An Analog World by George F Bryant  
 Modern Elec My p17 a Computers: For Some Problems An Analog Computer Can Do A Better Job  
     by Pete Stark

Radio Elec. D p78 a A Look at the Software to Control An 8 Channel Analog Monitor  
     by C Titus, P Rony, D Larsen & J Titus

Spectrum Jy p38 a Microcomputers Invade the Linear World by Robert L Morrison  
 73 F p166 a The Op Amp Encyclopedia by Joseph J Carr  
 73 Mr p98 a Programming Coil Design - at last a use for computers! by Al Gerbens  
 73 Ap p44 a How Do You Use ICs? (analog) by Alexander MacLean  
 73 Jy p78 a The New Op Amps - better, lower cost by Robert C Ghormley  
 73 Ag p108 a The BASICS of L-Network Design - your micro makes it simple by Al Gerbens

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Byte Ja p37 a Add More Zing to the Cocktail (uP controlled DVM Construction article)  
     by Steve Ciarcia

Comp. Des. Mr p152 a Monolithic Data Conversion Devices: Digital to Analog Converters  
 Comp. Des. Ap p188 a Monolithic Data Conversion Devices: Analog to Digital Converters  
     by Eric R Green

Comp. Des. Je p122 a Programmable Handheld Calculator Computes D/A Converter Errors SR52  
     by Paul Prazak

Comp. Des. S p113 a Interpretation of Data Converter Accuracy Specification by Eugene L Zuch  
 EDN Je20 p47 a Priority encoders provide A/D conversion by W Thomas Adams  
 EDN O 20 p133 a Complex analog I/O boards needn't be difficult to interface by John Conway  
 Electronics Ja5 p158 a RAM and d-a convertor form complex-waveform generator  
     by William A Palm & G A Williamson

Electronics Ja19 p113 a What to look for in analog input/output boards by Norman Bernstein  
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Electronics Jy6 p129 a Improved processor (8080) program boosts a-d conversion efficiency  
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     by William F Ittner & Jeffery A Miller

Elec. Des. Mr15 p110 a Quantize the feedback in a/d converters with uP. by Gary Grandbois  
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 Elec. Des. S 27 p88 a See how the IEEE488 bus works by designing a compatible a/d-d/a system  
     by Joe Hootman

Elec. Des. O 11 p238 a Shopping for the right analog I/O board, software considerations first t  
     by Fred Molinari, Paul Severinot & Edwin Kroeker

Ham Radio Ap p66 a uComputer Interfacing: Interfacing a 10-bit DAC  
     by P Rony, J Titus, C Titus & D Larsen

Kilobaud My p60 a Expand Your KIM Part 5: A/D interfacing (for joysticks!) by John Blakenship  
 Kilobaud Ag p102 a The Amazing 1802: D/A and A/D Applications by Robert J Cotter  
 Micro Ja p11 a Digital-Analog and Analog-Digital Conversion Using the KIM-1  
     by Marvin L DeJong

Per. Comput. Ja p73 a A/D Conversion by Steve Pollini  
 Pop. Elec. Jy p82 a Experimenter's Corner: Digital to Analog Converters Part 1 by Forrest M Mims  
 Pop. Elec. Ag p76 a Experimenter's Corner: Digital to Analog Converters. Part 2 by Forrest M Mims  
 Pop. Elec. S p45 a Build a Low-Cost A/D Converter by W L Green  
 Pop. Elec. S p92 a Analog to Digital Converters. Part 1 by Forrest M Mims  
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 Radio Elec. N p82 a How to use the 8085 with an A/D converter to Monitor 8 analog channels  
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73 O p161 a Computers and the Real World - practical D/A and A/D conversion  
     by Kenneth D Tentarelli

## APPLICATIONS. GENERAL

Byte O p6 e On Using a Personal Computer for a Practical Purpose by Carl Helmers  
 Byte N p112 a A Classroom Demonstration; Controlling a System with a Microcomputer by Garnet L Hill  
 Cr. Comput. Jy p79 a Does Your Car Need Oil? by Rob Lufkin  
 Cr. Comput. Jy p82 a Judo & The Black-Belted Computer (Scoring & Keeping Statistics) by Ramon C Barquin  
 Cr. Comput. Jy p92 a Piecing Together a Judo Program by Eben Ostby  
 Cr. Comput. S p112 a Distributed Processing "Dynamite"...Not Necessarily!! by James C Meehan  
 Cr. Comput. N p49 b The Mind Appliance: Home Computer Applications by T G Lewis  
 Cr. Comput. N p50 b 57 Practical Programs & Games In BASIC by Ken Tracton  
 Cr. Comput. N p94 a Need a Subject Index? Use NEPHIS by Timothy C Craven  
 Cr. Comput. N p156 a Season's Greetings Computer Generated Christmas Letters by Gordon Flemming  
 Dig. Design Ja p35 a Computer-Assisted Image Processing by Alan S Barrett  
 Dr. Dobbs N p46 l Astronomy Application For PET Forth by John P Oliver  
 Elec. Elec. My p72 a Don't Spare the Computer Time. Keep Your Bowling Records with this Prog. by Larry Friedman  
 Elec. Elec. N p32 a Figure Out the Best Bank for Your Dollars With this Program by Larry Friedman  
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 Interf. Age Ja p158 a Tax Calculation Program by Gary O Young  
 Interf. Age Ja p164 a The Tax Man by Gary O Young  
 Interf. Age F p68 a LSI-11 Microcomputers in Hospital ICU's by Ed Heesbeen  
 Interf. Age F p140 a The Tax Man - Part II by Gary O Young  
 Interf. Age Ap p167 a Use Your Computer to Sort Resistors by Lucille A Moody  
 Interf. Age Je p94 a Patents, Copyrights and Computers by Leonard Tachner  
 Interf. Age Jy p48 a European Interface: Archeology by Hans Drewitz & Roland Hesse  
 Interf. Age Jy p56 a Heart Attack: How You Can Predict It and Some Things You Can Do About It by Leo P Biese  
 Interf. Age Ag p72 a The Computation of Direction by Gene Szymanski  
 Interf. Age Ag p96 a Budgeting for Maintenance - The Hidden Iceberg by Wm J Schenker  
 Interf. Age Ag p108 a Complete Data Base Management System by Peter Reece  
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 Interf. Age O p82 a The 6800 Invades the Darkroom by R B Lang & C J Lang  
 Interf. Age O p96 a The Automated Attorney by Matthew Tekulsky  
 Interf. Age N p86 a Building and Land Developement Program by W S Chellberg  
 Kilobaud Mr p64 a Consumer Computer Inc., the ultimate answer to bill collectors by Joseph Roehrig  
 Kilobaud Je p84 a Bowling Scores for Dollars by Joe Roehrig  
 Kilobaud Jy p26 a Two Hobbies: Model Railroading and Computing by Dana W Zimmerli  
 Kilobaud Ag p62 a Two Hobbies: Model Railroading and Computing by Dana W Zimmerli  
 Micro F p3 a Employing the KIM-1 Microcomputer as a Timer and Data Logging Module by Marvin L DeJong  
 Mini Micro My p54 a An Undersea Robot  
 PCW Je p24 a Typing Without Tears (Touch typing) by Paul M Jessop  
 PCW Jy p62 a Pattern Recognition, The Ultimate Interface by David Hand  
 PCW Ag p16 a Getting Into Neighborhood Consultancy, You Have a Computer Use It! by David Francis  
 Peoples Jy p34 a Computers and Science Museums: A Public Access Model by Bob Kahn  
 Peoples S p20 a Computers and Science Museums: A Public Access Model by Bob Kahn  
 Peoples S p30 a Computerizing Museum Exhibits by Bruce Burdick  
 Per. Comput. Mr p19 a Testing ESP by Computer by David Galef  
 Per. Comput. Mr p53 a Measuring Reaction Time with Your Programmable Calculator  
 Per. Comput. Ap p71 a Analyzing Astrology by Phillip Isard  
 Per. Comput. My p15 a Pattern Recognition by Alan Filipski  
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 Per. Comput. N p49 a Model Rocketry for Computer Hobbyists by G Harry Stine  
 Per. Comput. D p48 b Programming for Poets by Richard Conway  
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 ROM F p22 a Computers Come to Chelsa Or. Generating Mailing Lists for Artists by Thorn Veblen  
 ROM F p29 a Up and Running AT THE ELECTIONS by Barbara Greenbaum  
 ROM Mr p66 a Things Computers Still Can't Do by Hubert L Dreyfus  
 Radio Elec. Je p94 a Microprocessor-Based Solar Controller by Dave Corbin  
 Spectrum S p30 a Personal Computers for the Entrepreneur by Don Mennie  
 73 F p72 a A Secret Weapon for Road Rallies by Bill Welborn  
 73 Ap p108 a If You Want To Know Where You Are - loran-C receiver by R W Burhans  
 73 My p146 a If You Want To Know Where You Are - loran-C receiver by R W Burhans

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Cr. Comput.	Ja	p30	a	Blue Wazoo by Jim Pallas
Cr. Comput.	Ja	p110	a	Poetry by Computer / Poetry by People
Cr. Comput.	My	p72	a	Interlocking Shapes, Enterprise in Space
Cr. Comput.	My	p84	a	Creating Computer Art by Russ Walter
Cr. Comput.	My	p100	a	Idols of Computer Art by Robert E Mueller
Cr. Comput.	My	p107	a	Computer Art: Stargate (Tektronix 4051) by Joe Jacobson
PCW	N	p13	a	The Micro Muse (poetry) by Eric Finlay
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Byte	S	p54	c	Correction for: Light Wand Amplifier (Byte May '78 p92)
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Byte	O	p166	a	Micro-Scan Corp. Bar Code Scanner by Frederick L Merkowitz
Byte	D	p184	a	A Proposal for a Kitchen Inventory System, (Barcoded Data) by Richard Shuford
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Cr. Comput.	Jy	p26	a	The Rise and Fall of Bar Codes by Steve North

## BIORYTHMS

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Cr. Comput.	Ja	p74	a	How Was I Yesterday? or Biorythmic Hindsight by J D Robertson
Interf. Age	F	p8	c	Correction for Biorythms (Interf. Age Oct '77 p138)
Kilobaud	F	p24	a	How Are You Feeling Today? biorythms with your KIM by Larry Woods
73	Mr	p110	a	Do Biorythms Really Work? HP-55 program you can use by N Richardson

## BOOKS AND PUBLICATIONS

Byte	S	p6	e	On Entering Our Fourth Year by Carl Helmers
Byte	S	p124	a	Clubs and Newsletters Directory
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Calc. Comp.	My	p78	a	Sources of Programs for PET and TRS-80 Computers (List of Neslettters)
Comp. Dec.	D	p78	a	COMPUTER DECISIONS 1978 Annual Index of Articles
Comp. Des.	D	p194	a	Computer Design 5 Year Index 1974-1978
Cr. Comput.	Mr	p64	a	DATAMAZING, April
Cr. Comput.	My	p22	a	Profile: Radio Shack TRS-80 User's Manual. Applications Programs by Stephen B Gray
Cr. Comput.	S	p166	a	Prospective Externals of the Xanadu Hypertext Network by Theodor Nelson
Cr. Comput.	N	p94	a	Need a Subject Index? Use NEPHIS by Timothy C Craven
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Elec. Des.	D 20	p104	a	Electronic Design 1978 Annual Index of Articles
Ham Radio	D	p130	a	Ham Radio Cumulative Index: 1969-1978
Interf. Age	Mr	p32	a	INTERFACE AGE Authors'/Cartoonists' Style Guide
Interf. Age	My	p64	a	Comprehensive Index to Interface Age 1975-1976 on Floppy ROM by W W Turner & W Thames
Interf. Age	My	p135	a	Cumulative Author Index to INTERFACE AGE, December 1975 to December 1977
Interf. Age	Ag	p34	a	White Collar Computer; Literature by James S White
Interf. Age	D	p42	a	The Mind Revolution: Book List by Merl Miller
Interf. Age	D	p54	a	1978 Index to Microcomputer Books
Kilobaud	O	p90	a	View from the Far East by Art Becker
Kilobaud	D	p120	a	KILOBAUD 1978 Index
Micro	Ag	p43	a	Classified Index: Micro 1-6 (OCT'77 to Sept '77)
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PCW	Jy	p70	a	How to find out through Libraries by Mark O'Connor

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Peoples	Mr	p15	b	Periodical Guide for Computerists by Eldon Berg
Peoples	N	p24	a	A Bibliography on Computer Chess by Eryk Vershen
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73 O	p74	a		Building From Magazine Articles - the breadboard/wire-wrap way by Rod Hallen
73 D	p270	a		PCs Are Easy --step by step details by Brian E McArthur

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Byte Mr	p174	a		Controlling the Real World by Hank Olson
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Byte Je	p153	a		A Theatrical Lighting Graphics Package by William Hensath, James Seawright, Emmanuel Ghent & Mimi Garrard
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Byte Jy	p72	a		Controlling DC Motors by Robert L Walton
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Cr. Comput.	Jy	p114	b	The Standard Data Encryption Algorithm by Harry Katzen
Cr. Comput.	S	p168	a	Cryptic Computer: Transposition Ciphers by Frederick W Chesson
Kilobaud	Je	p80	a	ASCII to Baudot...er...Murray (the Hard Way) by John A Lehman & Ray Graham
Per. Comput.	Ja	p76	a	CLOAK and DAGGER with your personal computer by Timothy Purinton
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ROM	Mr	p92	a	World War II's Legacy to Digital Techniques by Frederick W Chesson
73	Mr	p96	a	Another Approach to the ASCII/Baudot Headache - Model 15 to SWTP system by Garry O Caudell

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Comp. Des.	D	p94	a	BCD/Binary Conversion with Single IC Cell by M G Phadnis & D G Joshi
EDN	Ag20	p67	a	SR52 program converts binary to decimal by A R Campbell
EDN	O 20	p82	a	Z80 routine converts Gray code to binary by Donald J Zanolia
EDN	O 20	p150	a	Two IC's convert BCD code by Ladimer S Nagurney
Elec. Des.	Ja18	p86	a	It's time to convert to complex-BCD by Spyros G Varsos & Howard Taylor
Elec. Des.	D 6	p116	a	Change 7 segment data to BCD with dedicated, single chip converter by Gerald Buurma
Kilobaud	Ag	p80	a	From Base to Base—with Your HP-25 by James W Biglow
Kilobaud	N	p67	a	Universal Number Converter by Easton Beymer
Micro	O	p31	a	Apple Calls and Hex-Decimal Conversion by Marc Schwartz
Micro	O	p49	a	KIMBASE by Barry Tepperman
73	My	p110	a	Hex Converter For True-Blue Octalists - BASIC program by Irwin Doliner

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Byte	Ja	p162	a	Notes on Bringing Up a Microcomputer by Sol Libes
Byte	F	p6	a	A Penny Pinching Address State Analyzer by Steve Ciarcia
Byte	F	p162	a	Programming Entomology by Gary McGath
Byte	O	p12	a	A Memory Sensitivity Test by Don Kinzer
Comp. Dec.	Ag	p53	a	The dp environment, The Trouble With Static by Edward Paley
Comp. Des.	N	p99	a	Breakpoint Design for Debugging uProcessor Software by T P Hughes & D H Swain
Dig. Design	F	p56	a	Troubleshooting Microprocessor-Based Systems by Tom Clark
Dr. Dobbs	S	p33	a	A Programmable IC Tester for KIM by Joel Swank
EDN	F 5	p23	a	Comparator aids uP debugging by Ralph Tenny
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Kilobaud	Ap	p64	a	Memory Debugging, which chip is it? by Albert Brunelli
Kilobaud	My	p42	a	Writing Diagnostic Routines, while your machine is running by Robert Baker
Kilobaud	Jy	p9	a	Trouble Shooters Corner by Ralph Wells
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Kilobaud	Ag	p40	a	Software Debugging for Beginners by John Leslie
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PCW	Jy	p52	a	8080 Debug Routine by Margaret Berg
PCW	D	p24	a	Byte Basher's Life Saver by Brian Hewart
Per. Comput. Ap		p22	a	Debugging your Software: Program Testing by Robert T Nicholson
Radio Elec. N		p41	a	How To Troubleshoot Digital Circuits by L Steven Cheairs
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Electronics	Ap27	p126	a	PROM adds bootstrap loader to Intellic-8 development system by Bernard Boule' & Simon Gagne'
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Electronics	N 23	p147	a	One-button controller issues step, run and halt commands by Robert Dougherty
Electronics	D 7	p151	a	Single-wire pair multiplexes power and data for display by Tommy N Tyler
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EDN	F 5	p26	a	Numeric and alphanumeric displays by Earle Dilatash
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Electronics	My11	p125	a	One chip controls keyboard and display by Lorne Trottier & Branko Matic
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Byte	Ap	p90	a	A College Microcomputer Facility by Bill Foster & Bob Southern
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Calc. Comp.	Ja	p15	a	When Does a Fraction Yield a Terminating Decimal? (Calculator) by Rick Billstein & Johnny W Lott
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Cr. Comput. S p96 a A Drop-In Computer Center for High-School Students by Karl Zinn

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Interf. Age F p42 a Programming the Human Computer: Microcomputer Courses by Merl Miller

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Interf. Age S p39 a White Collar Computers: Education by James S White

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Byte My	p158 b	The Dragons of Eden by Carl Sagan
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Cr. Comput. My	p8 e	Things To Come by David H Ahl
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Interf. Age	Je	p56	a	A Feasting of Thoughts, A Banquet of Words (Theatre of the Future) by Ray Bradbury
Kilobaud	Je	p64	a	The Great Computer Conspiracy by Clint H Woeltjen
PCW	Je	p8	a	Power to the People by W V Ringer
PCW	Jy	p14	a	A Day in the Life of a Retail Computer Store CIRCA 1981 by Tim Moore & Andrew Stephenson
Peoples	Mr	p8	a	Microcomputers in 1978 by Adam Osborne
Per. Comput. Mr		p81	a	Future Computing: Product Ponderings by Russ Walter
Per. Comput. My		p58	a	Electronic Fund Transfers. A Promise or a Threat? by H Paris Burstin
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## GAMES: CALCULATOR

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Byte	D	p192	a	Commander in Chief. A Game or the TI-58 Programmable Calculator by Larry Kollar
Calc. Comp. Ja		p29	a	Finding the Klingon in Your Calculator by John J Wavrik
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Calc. Comp. My		p31	a	Solitaire Mastermind With Programmable Calculators by David L Dunlop
Calc. Comp. S		p62	a	Shooting the Klingon in your Calculator by John J Wavrik
Calc. Comp. S		p72	a	A Realistic Model Rocket Program for a Small Programmable Calculator by Robert J Reiland
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Kilobaud	F	p66	a	Ready on the Firing Line? "Artillery Practice" for the SR-56 by Kenneth E Wigger
Kilobaud	Mr	p106	a	Tiger Trouble! TI Programmable-Calculator Safari
Kilobaud	Je	p19	c	Correction for Tiger Trouble (Kilobaud March '78 p106) by David P Leising
Kilobaud	Je	p68	a	Cross-Country Balloon Trip, SR-52 game by Mac Oglesby
PCW	S	p24	a	Three Novelty Programs for a Pocket Calculator by Derek J Chown
PCW	O	p32	a	Touchdown, 'Lunar Landing Game for Casio Programmable Calculators' by N Rushton
73	S	p100	a	Nuclear Attack! - WWII on your SR-52 by Dan Everhart

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Byte	Ja	p108	a	The Second World Computer Chess Championships by Peter R. Jennings
Byte	Mr	p166	a	Microchess 1.5 versus Dark Horse by Peter Jennings
Byte	O	p86	a	First Steps in Computer Chess Programming by Kathe and Dan Spracklen
Byte	O	p168	a	A Computer Chess Tutorial by Norman D Whaland
Byte	O	p182	a	Creating a Chess Player; An Essay on Human & Computer Chess Skill by Peter W Frey & Larry R Atkin
Byte	N	p16	a	An Exchange Evaluator for Computer Chess by Dan and Kathe Spracklen
Byte	N	p162	a	Creating a Chess Player Part 2: Chess 0.5 by Peter W Frey & Larry R Atkin
Byte	D	p84	a	Chess 4.7 versus David Levy; The Computer Beats a Chess Master by J R Douglas
Byte	D	p140	a	Creating a Chess Player Part 3: Chess 0.5 (continued) by Larry R Atkin & Peter W Frey
Cr. Comput. My		p58	a	Can a Computer Really Play Winning Chess? by David H Ahl
Elem. Elec. Jy		p69	a	Choose This Tricky Computer for Challenging Chess by Norman Meyers
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PCW	N	p15	a	PCW Microcomputer Chess Championship by David Levy
Peoples	N	p23	a	Some Guidelines for Microcomputer CHESS by Jim Day
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Pop. Elec. D p48 a Build a Computer-vs-You Chess Game by Bill Green

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Byte	Ap	p64	c	Correction for NIMBLE: The Ultimate NIM? (Byte Nov '77 p177) by Fletcher Thane Carson
Byte	Ag	p166	a	JACPOT (BASIC) by Edwin E Hastings
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Byte	D	p76	a	Life by William Englander
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Calc. Comp. Ja		p50	a	GEOPAGES by Mac Oglesby
Calc. Comp. F		p64	a	Wordfind by Mac Oglesby
Calc. Comp. F		p88	a	MECC Listing for APPLE Selling Program
Calc. Comp. Mr		p5	a	Bagels and Jotto; Logic Games for the Computer (or Paper and Pencil) by Joanne Koltnow Verplank
Calc. Comp. Ap		p5	a	DROIDS a computer/board game by Mac Oglesby
Calc. Comp. Ap		p12	a	Speaking of Animals by Linda M Schreiber
Calc. Comp. Ap		p16	a	PHANTNUM An Elementary Mathematics Game by Howard A Peele
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Cr. Comput. N		p104	a	GAMES—NOT JUST FOR FUN Unvarnished Truth About KIM? by Jim Butterfield
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Elem. Elec. My		p53	a	e/e assembles the...Cosmac VIP Computer Game
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                   by Lance E Strickler, John H Buffington & Ivy Fleck Strickler  
 Interf. Age F p167 a World Power (War Game) by Joe Jaworski  
 Interf. Age Mr p60 a SFS Walletsize Spaceship Simulator Part II  
 Interf. Age Ag p56 a European Roulette In Color by W C Hoffer  
 Interf. Age Ag p63 a \*MISFIT\* by Bruce A Scott  
 Interf. Age Ag p64 a PING PONG for the 8080 by Elliot Myron  
 Interf. Age Ag p68 a Video Game Techniques in North Star BASIC for the SOL VDM-1 by Robert C A Goff  
 Interf. Age S p128 a Child's Play Number Games for Begining Micro-Bugs by Karen S Wolfe  
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 Kilobaud Ja p90 a Rocket Pilot an interactive game for the Apple II by Robert J Bishop  
 Kilobaud Mr p34 c Correction for Rocket Pilot (Kilobaud Jan '78 p91)  
 Kilobaud F p52 a Star Wars an exciting Apple-II graphics game by Robert J Bishop  
 Kilobaud F p112 a Deflection! a video game for the quick and agile by Andrew A Recupero  
 Kilobaud Mr p28 a State Capitals, anew education program for the kids by Dave Alverson  
 Kilobaud Mr p120 a A Different Approach to HI-LO let the computer guess! by Irwin Doliner  
 Kilobaud Ap p22 a Kilobaud's Mystery Program are you ready for this? by Tom Rugg & Phil Feldman  
 Kilobaud Ap p66 a 3-D Tic-Tac-Toe, a winner with the whole family! by Joseph Roehrig  
 Kilobaud Je p20 c Correction for 3D Tic Tac Toe (Kilobaud April '78) by Joseph J Roehrig  
 Kilobaud Ap p90 a Incredizing, amazing, incredible game for 8080 systems by Philip Tubb  
 Kilobaud Jy p84 a Battleship by Harley Dyk  
 Kilobaud Ag p54 a Swords and Sorcery! by Bruce Turrie  
 Kilobaud Ag p69 a Update: Lunar Lander. Improves speed o May'77 Lunar Lander program  
                   by Malcolm Shore  
 Kilobaud S p62 a Tally Ho! by Jack A Inman  
 Kilobaud O p10 b The Way To Play  
 Kilobaud O p76 a Action on the Enterprise by Ed Juge  
 Kilobaud D p64 a Spelling Bee by David B Moody  
 Micro Je p5 a LIFE for your PET by Frank H Covitz  
 Micro D p11 a LIFE for your APPLE by Richard F Suttor  
 Modern Elec Je p40 a Program: Craps by Carmine W Prestia  
 PCW Je p56 a SCRAMBLE! by Graham J Trott  
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 Peoples My p16 a Casino, A Small System Simulator by Borge Christensen  
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 Peoples My p45 a Tiny BlackJack by Milan Chepko  
 Peoples My p54 a WUMPUS (TRS-80)  
 Peoples Jy p26 a BASEBALL by Garth Dollahite  
 Peoples Jy p54 a Concentration by Milan D Chepko  
 Peoples S p8 a The Invasion of KINGDOM by Lee Schneider & Todd Voros  
 Peoples S p46 a HORSES by Andy Stadler  
 Peoples S p48 a JUMBLE by M C Hofheinz  
 Peoples N p13 a RUNQUEST by Steve Perrin & Friends  
 Peoples N p17 a TRS-80: FROGS! by Ramon M Zamora  
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 Peoples N p28 a H-A-N-G-M-A-N by Ron Santore  
 Peoples N p44 a REVERSE by Ramon A Zamora  
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 Per. Comput.F p53 a Play STAR WARS by Jerry Self  
 Per. Comput.F p81 a Touching Down On: Computer Football (How the game is played) by Joe Roehrig  
 Per. Comput.Ap p76 a Rolling the Bones by Timothy Purinton  
 Per. Comput.My p70 a Doing the 52 Card Shuffle by Andrew Russakoff  
 Per. Comput.My p73 b Game Playing with BASIC by Donald G Spencer  
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 Per. Comput.Je p44 a Factor Game by Herbert L Dershem  
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Dr. Dobbs Ja		p7	l	Consumer Do's and Don't's from a Dealer by Bobby Williams

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Dr. Dobbs	F	p3	1	More Good Advice on Mail Ordering by John D Hirsch
Elec. Des.	My10	p85	a	Computers in the home are only as good as their peripherals
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73	Ja	p98	a	How to Keep Your Computer Happy

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Byte	Mr	p174	a	Controlling the Real World by Hank Olson
Byte	Ap	p114	a	Tune In and Turn On Part 1: A Computerized Wireless AC Control System by Steve Ciarcia
Byte	Ap	p158	b	Your Home Computer by James White
Byte	My	p97	a	Tune In and Turn On, Part 2: An AC Wireless Remote Control System by Steve Ciarcia
Byte	Je	p166	a	Audio Processing with a Microprocessor; Adding a Virtual Tape Loop by Tom O'Haver
Byte	N	p66	a	Checkbook Balancer (BASIC) by Rod Hallen
Byte	D	p184	a	A Proposal for a Kitchen Inventory System, (Barcoded Data) by Richard Shuford
Calc. Comp.	Ap	p11	a	put the HOME in home computer by Linda M Schreiber
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Cr. Comput.	My	p108	a	BASIC Financial Behaviorism or First Steps Toward a Real Budget by Dennis J McGuire
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Kilobaud	Ja	p122	c	Correction for AC-30 Control Decoder (Kilobaud Sept '77) by Phil Hughes
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Per. Comput.	Ag	p23	a	Computing on the Rocks (Drink Mixing) by Sam Newhouse
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                   by Dan Sokol, Gary Muhonen & Joel Miller  
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Comp. Des.	Jy	p128	a	Altair Timesharing BASIC by Susan Blumenthal & Stan Webb
Comp. Des.	N	p158	a	Interfacing Fund: Assembly Language or BASIC, Which Way to Go? by D Larsen, P Rony, C Titus & J Titus
Cr. Comput.	Ja	p58	a	The 8-hour Wonder, All About BASIC Programming in One Long Day by Thomas A Dwyer
Cr. Comput.	Mr	p84	a	An Evaluation of an Extended BASIC, an 8K BASIC, and a Micro-APL by Steve North
Cr. Comput.	My	p80	b	Fun With Computers and BASIC by Donald D Spencer
Cr. Comput.	N	p50	b	57 Practical Programs & Games In BASIC by Ken Tracton
Cr. Comput.	N	p116	a	INDXA A BASIC Routine File Index by Rod Hallen
Cr. Comput.	N	p146	a	Snowflake Plotting in ALGOL and BASIC by James Jones
Dr. Dobbs	F	p8	a	BASIC Searcher/Patcher for MITS 4.0 or 4.1 BASIC by James Monagan
Dr. Dobbs	Mr	p4	a	Renumbering & Appending BASIC Programs on the Apple II Computer by Steve Wozniak
Dr. Dobbs	Mr	p10	a	Strubal: A Structured BASIC Compiler by Robert D Grappel
Dr. Dobbs	Je	p31	a	LAZARUS, Program to Resurrect BASIC Programs on the APPLE-II Computer by Andy Hertzfeld
Dr. Dobbs	Je	p42	a	A Z-80 Disassembler in TDL 8K BASIC
Dr. Dobbs	Ag	p34	a	A BASIC Renumbering Program by John B Trenham
Dr. Dobbs	O	p13	a	Quick and Dirty Functions for BASIC by Dennis Allison
Elem. Elec.	Mr	p79	a	e/e Beginning Programming with BASIC
Interf. Age	F	p82	a	Structured Programming In BASIC by Kamal Shah
Interf. Age	Ap	p140	b	BASIC by Samuel L Marateck
Interf. Age	Ap	p141	b	Some Common BASIC Programs by Lon Poole & Mary Borchers
Interf. Age	My	p133	b	Beginning BASIC by Paul M Chirlian
Interf. Age	My	p160	a	BASIC's Token of Good Fortune by Tim Ryan
Interf. Age	Je	p156	a	DEBBI - Auser Report (Disk Extended BASIC by ICOM) by Jerald L Ripley
Interf. Age	D	p129	a	PEEK and POKE A Total by Douglas L Jones
Kilobaud	Ja	p14	b	An Introduction to BASIC by M R Eagle
Kilobaud	Ja	p50	a	A Tale of Four BASICs which one for your 6800? Sphere, Pittman, SWTP, TSC by Rich Didday
Kilobaud	F	p7	a	The BASIC Forum; Data Storage by John Arnold & Dick Whipple
Kilobaud	Mr	p6	b	Advanced BASIC Applications and Problems by James S Coan
Kilobaud	Ap	p8	a	The BASIC Forum: How Effective is BASIC? by John Arnold & Dick Whipple

**LANGUAGES: BASIC continued**

Kilobaud	My	p94	a	Strings and Things, BASIC conversion techniques by Richard Roth
Kilobaud	Je	p11	b	Simplified BASIC Programming by Gerald & Joan Silver
Kilobaud	Jy	p10	a	The BASIC Forum, standardization by John Arnold & Dick Whipple
Kilobaud	Jy	p12	b	Illustrating BASIC (A Simple Programming Language) by Donald Alcock
Kilobaud	Jy	p12	b	Basic BASIC Programming by Anthony Peluso, Charles Bauer & Dalward DeBuzzi
Kilobaud	Ag	p44	a	Mits vs North Star: Which Is Faster? by Fred R Ruckdeschel
Kilobaud	Ag	p110	a	Can't Find It? SWTP BASIC Manual Index by Charles E Thomas
Kilobaud	S	p8	b	BASIC and the Personal Computer by Thomas Dwyer & Margot Critchfield
Kilobaud	S	p112	a	From Big BASIC to Tiny BASIC by William L Colsher
Kilobaud	O	p11	b	The BASIC Workbook by Kenneth E Schoman
Kilobaud	O	p62	a	Randomness is Wonderful. How is your BASIC's random number generator? by Bill Rogers
Kilobaud	D	p14	b	BASIC for Home Computers--A Self Teaching Guide by Albrecht, Finkel & Brown
Kilobaud	D	p14	b	Computer Programming in BASIC for Everyone by Thomas A Dwyer & Michael S Kaufman
Kilobaud	D	p14	b	Introduction to BASIC by Jeffery B Morton
Mini Micro	O	p106	b	Three Books on Programming in BASIC by Eileen Hemenway
Modern Elec	My	p46	a	BASIC plain talk to your home computer by Peter A Stark
PCW	My	p42	a	Basic Pontoon by Gilbert Percival
PCW	Je	p20	a	BASIC The First Steps by Philip Couzens
PCW	Jy	p76	b	Illustrating BASIC (A Simple Programming Language) by Donald Alcock
PCW	O	p8	b	Some Common BASIC Programs by L Poole & M Borchers
PCW	N	p33	a	How To Control Your BASIC Functions by Christopher Smith
Peoples	Ja	p36	a	COMAL: Structured BASIC by Borge R Christensen
Peoples	Ja	p41	a	PASCAL vs BASIC by David A Mundie
Peoples	My	p44	a	The Little Book of BASIC Style by John M Nevison
Peoples	S	p27	b	Illustrating BASIC by Donald Alcock
Per. Comput.	Ja	p44	a	Illustrating BASIC (A Simple Programming Language) by Donald Alcock
ROM	F	p77	a	Even More BASICally by Robert Fahey
ROM	F	p84	a	Translate! (8K BASIC to Disk Basic) by Gordon Morrison

**LANGUAGES: TINY BASIC**

Dr. Dobbs	Je	p34	a	A Tiny BASIC Extensions Package by Leor Zolman
Dr. Dobbs	O	p3	l	Editing Tiny BASIC by Richard Greenlaw
Kilobaud	O	p44	a	Not so Tiny by Charles R Carpenter
Peoples	S	p34	a	Decimals in Tiny BASIC by Milan D Chepko

**LANGUAGES: FORTRAN**

Byte	D	p194	a	FORTRAN and Its Generalizations by W Douglas Maurer
Mini Micro	O	p78	a	The 8080 gets a "full blown" FORTRAN by Jack Hemenway

**LANGUAGES: PASCAL**

Byte	Ap	p150	a	Concerning PASCAL: A Homebrew Compiler Project by Stephen P Smith
Byte	My	p46	a	UCSD PASCAL: A (Nearly) Machine Independent Software System by Kenneth L Bowles
Byte	My	p136	a	Comments on PASCAL, Learning How to Program, and Small Systems by Gary A Ford
Byte	Ag	p6	e	A Vision of an Industry by Carl Helmers
Byte	Ag	p16	a	About the Cover (Pascal's Triangle) by Carl Helmers
Byte	Ag	p46	a	A Homebrew Pascal Compiler by Herbert Stein
Byte	Ag	p50	a	Compilation and Pascal on the New Microprocessors by Charles H Forsyth & Randall J Howard
Byte	Ag	p78	a	PASCAL A Structurally Strong Language by Stephen R Alpert
Byte	Ag	p110	a	In Praise of Pascal by David A Mundie
Byte	Ag	p117	a	A Proposed Pascal Compiler by Herbert Yuen & Kin-Man Chung
Byte	Ag	p122	a	Pascal vs COBOL, Where Pascal Gets Down to Business by Ken Bowles
Byte	Ag	p168	a	Pascal vs BASIC: And Exercise by Allan M Schwartz
Byte	S	p58	a	A "Tiny" Pascal Compiler Part 1: The P-Code Interpreter by Kin-Man Chung & Herbert Yuen
Byte	O	p34	a	A "Tiny" Pascal Compiler Part 2: The P-Compiler by Kin-Man Chung & Herbert Yuen
Byte	N	p134	b	(Microcomputer) Problem Solving Using PASCAL by Kenneth L Bowles
Byte	N	p182	a	A "Tiny" Pascal Compiler Part 3: P-Code to 8080 Conversion by Kin-Man Chung & Herbert Yuen
Byte	D	p179	l	Pascal Critique and a Comment by J O'Loughlin
Cr. Comput.	S	p149	a	PASCAL From BEGINning to END by Jim Merritt

## **LANGUAGES: PASCAL continued**

**LANGUAGES: PILOT**

Cr. Comput.	S	p68	a	Profile: PET Cassettes from Peninsula School by Steve North
Dr. Dobbs	F	p43	a	Mini-Editor for 8080 PILOT by Tim Scully
Dr. Dobbs	Ap	p22	a	A Line Oriented PILOT Editor by David J Morgan
Dr. Dobbs	Ag	p46	a	Common PILOT: Progress Report by Larry Kheriaty & George Gerhold
Interf. Age	S	p64	a	PILOT: A Programming Language for Beginners by Rita May Liff & Keith Vann
Kilobaud	Mr	p66	a	Programmed Instruction Made Easy: Tiny PILOT part 1: Language Descript. by Allen S Kreiger
Kilobaud	Ap	p70	a	Programmed Instruction Made Easy: Tiny PILOT Part 2: developing your own by Allen S Krieger
PCW	O	p19	a	PILOT Flies Across the Atlantic by John Coll

## **LANGUAGES: TINY LANGUAGES**

Dr. Dobbs	S	p28	l	Strubal vs Forth by Robert D Grappel
Interf. Age	S	p124	a	Introduction to the TEX Language Part 2 by Robert W Bemer
Kilobaud	Je	p42	a	Tiny BASIC Shortcuts by Charles R Carpenter
Peoples	Ja	p48	l	Tiny Language Reader Feedback
Peoples	My	p34	a	Tiny Language Talk by Sam Hills
Peoples	S	p36	a	APL as a Tiny Language by Mokurai Cherlin

## **LANGUAGES: OTHER LANGUAGES**

Byte	Ag	p122	a	Pascal vs COBOL, Where Pascal Gets Down to Business by Ken Bowles
Cr. Comput.	My	p28	a	Beginner's View of the SAM76 Language by Claude A Kagan
Cr. Comput.	S	p16	c	Correction for SAM 76 (Cr. Computing May '78 p30) by Karl Nicholas
Cr. Comput.	S	p118	a	SMAL/80
Cr. Comput.	N	p146	a	Snowflake Plotting in ALGOL and BASIC by James Jones
Dr. Dobbs	Ja	p18	a	The SAM76 Language by Ancelme Roichel
Dr. Dobbs	Mr	p20	a	ACT An 8080 Macroprocessor by Alex Cecil
Dr. Dobbs	Mr	p46	l	SAM 76 - Additional Comments by Ancelme Roichel
Dr. Dobbs	Ap	p27	a	ACT An 8080 Macroprocessor by Alex Cecil
Dr. Dobbs	My	p21	a	FORTH for Microcomputers by John S James
Dr. Dobbs	Je	p45	l	More Dope on NIBL by Mark Alexander
Dr. Dobbs	Je	p46	a	SAM76 Language Update
Dr. Dobbs	S	p24	a	Lisp for the M6800 by Frits Van Der Wateren
Dr. Dobbs	S	p26	a	FORTH Dump Programs by John S James
Dr. Dobbs	N	p4	a	A LISP Interpreter for the 8080 by Darrel VanBuer
Dr. Dobbs	N	p26	a	BASEX: A Fast, Compact Interactive Compiler for Microcomputers by Paul K Warne
Dr. Dobbs	N	p44	l	ASM76-Forth-Strubal by Ancelme Roichel
EDN	Je20	p78	a	What type of programming language best suits OEM designs? BSAL by Lawrence Gray
Electronics	Ag3	p115	a	High Level Languages ease uC programming by J Lynn Saunders & Larry E Lewis
Elec. Des.	S 1	p110	a	A structured higher-level language, English like TLC by Tony Karp & Marilyn Karp
Interf. Age	Ag	p144	a	Introduction to the TEX Language by Robert W Bemer
Interf. Age	O	p126	a	Introduction to the TEX Language Part 3 by Robert W Bemer
Mini Micro	N	p86	a	Z-80 COBOL - a big league language in a little machine by Eileen & Jack Hemerway
PCW	Ag	p39	a	Getting It Together, Assemblers & Assembly Language by Mike Banahan

## LANGUAGES: OTHER LANGUAGES continued

PCW	S	p32	a	Getting It Together, Build Your Own Assembler by Mike Banahan
PCW	O	p55	a	Getting It Together (Z-80 Assembler) by Mike Banahan
PCW	N	p27	a	Getting It Together Build Your Own Assembler Listing Continued by Mike Banahan
Peoples	Ja	p36	a	COMAL: Structured BASIC by Borge R Christensen
Peoples	S	p27	b	The C Programming Language by Brian Kernighan & Dennis M Ritchie
ROM	Ja	p36	a	TLC The Visual Programming Language by Tony Karp
ROM	Ja	p64	a	The Computer and Natural Language by Joseph Weizenbaum
ROM	F	p44	a	Assemblers by Eben Ostby
ROM	Mr	p74	a	LISP is a Nifty Language by Eben Ostby

## LOGIC CIRCUITS &amp; FUNDAMENTALS

Byte	F	p25	a	Some Musings on Boolean Algebra by Dan Bunce & Art Schwartz
Byte	Jy	p118	c	Correction for: Musings On Boolean Algebra (Byte Feb '78 p26)
Kilobaud	Ja	p74	a	Kilobaud Klassroom #8 pulses—and more pulses by George Young
Kilobaud	F	p76	a	Kilobaud Klassroom #9 Counters and Registers by George Young
Kilobaud	My	p84	a	Number Crunching: 2 Hardware Solutions, faster & smoother than Software by Adam Osborne
Kilobaud	Ag	p36	a	Kilobaud Klassroom #11; Data and Address Buses by Peter A Stark
Kilobaud	O	p110	a	Build a One-Chip Single Stepper by Philip Ngai
PCW	My	p32	a	The Gates of Reason; An Introduction to Computer Logic by Michael Whitney
PCW	Jy	p16	a	The Gates of Reason: Standard Logic by Patrick Sutton
PCW	D	p21	a	Hints on System Design by Mike Dennis
Pop. Elec.	F	p82	a	Experimenter's Corner: The Schmitt Trigger by Forrest M Mims
Pop. Elec.	Mr	p84	a	Experimenter's Corner: Three-State Logic by Forrest M Mims
Pop. Elec.	Ap	p50	a	Micro-Processor Microcourse; Part 2. Basic Digital Logic by Forrest M Mims
Pop. Elec.	Je	p88	a	Experiments with Programmable Logic Arrays by Karl Lunt
Radio Elec.	D	p63	a	How to Design Digital Circuits by Jerry Woolsey
73	Ja	p40	a	IC Timer Review
73	Ja	p188	a	Logical Logic

## MATH: GENERAL

Byte	Ja	p150	a	A Novice's Eye on Computer Arithmetic by Wayne Ledder
Byte	F	p25	a	Some Musings on Boolean Algebra by Dan Bunce & Art Schwartz
Byte	Jy	p118	c	Correction for: Musings On Boolean Algebra (Byte Feb '78 p26)
Byte	Ap	p156	b	Scientific and Engineering Problem Solving with the Computer by William Ralph Bennett
Byte	My	p104	a	How to Multiply in a Wet Climate Part 2: Design Details by Jack Bryant & Manot Swasdee
Byte	My	p151	l	Reading Strings: A Novice's Eye on Computer Arithmetic (Byte Jan '78 ) by Eric Hamilton
Byte	Je	p109	a	Those Calculating Romans by Laurence G Dishman
Byte	S	p114	a	Math in the Real World by Joel Boney
Byte	S	p156	a	Graphic Manipulations Using Matrices by Joel C Hungerford
Byte	N	p34	a	Functional Approximations by Fred Ruckdeschel
Byte	D	p14	a	Fast Fourier Transforms on Your Home Computer by William D Stanley & Steven J Peterson
Byte	D	p128	a	Clockless Multiplication and Division by Mike Weed
Calc. Comp.	Ja	p15	a	When Does a Fraction Yield a Terminating Decimal? (Calculator) by Rick Billstein & Johnny W Lott
Calc. Comp.	Ja	p71	a	Comparison of Numerical Problem Solving Under 3 Types of Calc. Condition by Dennis M Roberts & Shawn M Glynn
Calc. Comp.	Ja	p77	a	Finding Roots with a Four-Function Calculator by Douglas E Scott
Calc. Comp.	Ja	p82	a	Squares, Square Roots, & the Quadratic Formula by George McCarty
Calc. Comp.	F	p69	a	Numerical Problem Solution as a Function of Calculation Mode & Task Diff by Dennis M Roberts & Shawn M Glynn
Calc. Comp.	F	p74	a	Comments & Notes from Finding The Klingon in Your Calculator by John J Wavrik
Calc. Comp.	Mr	p57	a	Repeating Decimals by Gerald R Smith
Calc. Comp.	Mr	p63	a	Effects of Method, Prepractice & Instructional Work on Problem Solving by Dennis M Roberts & Lawrence Fabrey
Calc. Comp.	Ap	p16	a	PHANTNUM An Elementary Mathematics Game by Howard A Peelle
Calc. Comp.	Ap	p29	a	A Monadic Module Alias A Unary Unit by J F Weaver
Calc. Comp.	Ap	p36	a	Calculator Arithmetic by David Moursund
Calc. Comp.	Ap	p64	a	More About Repeating Decimals by Janet Morris
Calc. Comp.	Ap	p69	a	Calculator Experiments for Junior High by Frank S Toth
Calc. Comp.	Ap	p74	a	Computational Perf. with Different Calc. Methods & Task Difficulties by Dennis Roberts & Jackie Lerner

**MATH: GENERAL continued**

Calc. Comp. My	p58	a	Learning Mathematics Through Programming by Douglas W Clark
Calc. Comp. My	p79	a	Some Monadic/Dyadic Combos by J F Weaver
Calc. Comp. S	p12	l	Program to solve or Mean, Standard Deviation and "Normal Curve" SR-56 by David W Johnston
Calc. Comp. N	p42	a	Random Numbers & Pocket Calculators by Mark Zimmermann
Calc. Comp. N	p50	a	Measuring Triangles, A Lesson to Discover the Pythagorean Property by Marlinde Jurgenson
Calc. Comp. N	p60	a	Two Kinds of Random Numbers by Douglas E Scott
Calc. Comp. N	p65	a	Computer Supplemented Calculus by Kendell Hyde & David Tolman
Comp. Des. F	p111	a	Numerical Interpolation for uProcessor Based Systems by Thomas A Sein
Comp. Des. Ap	p168	a	uC Interfacing: Integer Addition & Subtraction by C Titus, J Titus, P Rony & D Larsen
Comp. Des. My	p214	a	uC Interfacing: Integer Multiplication & Division by Peter Rony, David Larsen, Chris Titus & Jon Titus
Comp. Des. Je	p113	a	Software Analyses for Combinatorial Logic by John L Pokoski
Cr. Comput. Ja	p126	a	The Square Root of 4 is Not 2, It's 1.99999 by Philip Stein
Cr. Comput. Jy	p70	a	Short Programs: Convergence Revisited by George Ball
Cr. Comput. S	p30	a	The Origin of the Times Sign? by John F Rogers
Cr. Comput. S	p69	a	Computer Simulations and Problem-Solving in Probability by John S Camp
Cr. Comput. S	p171	a	Theorem Proving by Bryant W York
Cr. Comput. N	p98	a	Random Thoughts on RND by Thomas N Ronayne
Dig. Design Je	p52	a	Array Processing, Eases High-Speed Vector Computation by Allan S Margulies
Elec. Des. Ja	p78	a	Multiplying with a microcomputer by Anthony Kolodzinski & David Wainland
Interf. Age S	p130	a	On A Bi-Lingual Math Tutoring Program by Marvin Mallon
Interf. Age O	p74	a	A Special Function Approximation Method and its Application by Dr Endre Simonyi
Kilobaud Mr	p42	a	Number Crunching Time, algebra the easy way by Mel Baker
Kilobaud My	p48	a	Computer Math Primer, beginner's introduction to number systems by Peter Stark
Kilobaud My	p84	a	Number Crunching: 2 Hardware Solutions, faster & smoother than Software by Adam Osborne
Kilobaud N	p18	b	A History of Pi by Petr Beckmann
Micro Ag	p15	a	Apple Pi by Robert J Bishop
PCW S	p19	a	Precisely Speaking by Sheridan Williams
PCW N	p19	a	An Agile Algorithm by R E L Ferguson
PCW N	p21	a	Prime Numbers Competition by Sheridan Williams
PCW N	p25	a	A Way With Waves (Sine) by Gordon Bell
PCW N	p26	a	Aligning the Decimal Point by Sidney A Leleux
Per. Comput. Ap	p53	a	Fishing the MOD Way. (Modulus Arithmetic) by O E Dial
Per. Comput. My	p75	a	Math For Minors by Mike Donahue

**MATH: PROBLEMS & PUZZLES**

Byte O	p122	a	Solving the Eight Queens Problem by Terry Smith
Byte N	p135	a	Hextext by Thomas J Dunsheath
Calc. Comp. Ja	p46	a	The Problem Corner (Social Chains) by Art Hiatt
Calc. Comp. F	p35	a	recycle The Tin Can Problem by Donald Clyde
Calc. Comp. F	p46	l	Solution for Tin Can Problem (SR-56) (CC Nov '77 p57) by David W Johnston
Calc. Comp. Mr	p5	a	Bagels and Jotto; Logic Games for the Computer (or Paper and Pencil) by Joanne Koltnow Verplank
Calc. Comp. Mr	p90	a	The Problem Corner: Special Sums by Art Hart
Calc. Comp. S	p86	a	The Problem Corner by Joe Yee
Calc. Comp. N	p73	a	Problem Solving What Are Problems?
Comp. Des. Jy	p67	a	State of the Art in High Speed Arithmetic Integrated Circuits by Shlomo Waser
Comp. Des. D	p144	a	External Arithmetic Processors
Cr. Comput. Ja	p54	a	Puzzles & Problems: Debugging the Raise, Cubiquiz, Perfect Rectangle
Cr. Comput. Mr	p42	a	Game and Puzzle Cards by Stan Laird
Cr. Comput. Mr	p132	a	Short Programs...Convergence
Cr. Comput. My	p46	a	The Mechanical Mouse, Can You Flowchart His Maze Path? by John Maniates & James S Quasney
Cr. Comput. My	p66	a	Puzzles & Problems
Cr. Comput. My	p68	a	The Perfect Puzzle for Computer Mathematics by Lynn D Yarbrough
Cr. Comput. My	p70	a	Computer Conversations
Cr. Comput. S	p64	a	Puzzles & Problems
Cr. Comput. S	p146	a	40 Programming Ideas by J Cletheroe
Cr. Comput. N	p115	a	Puzzles & Problems: Odd One Out, Inspired Gifts, Series Limits
Kilobaud N	p98	a	Lucas' Puzzle by William L Colsher
Per. Comput. Ap	p46	a	Algorithms and Flow Diagrams, Step-By-Step Problem Solving by B A Scott
Per. Comput. My	p82	a	The Computer Solves the Four Color Map Problem by Willard E Matheson

**MATH: PROBLEMS & PUZZLES continued**

Per. Comput. Jy p30 a Petals Around the Rose Revisited by Ken Jackman

**MEDICAL APPLICATIONS**

Cr. Comput. Jy p48 a The Telltale Heart: EKG Processing by Microcomputer  
by Farhad Forbes, Harry Garland & Takao Tsuiki

EDN F 5 p19 a uC-based key-to-speech synthesizer gives stroke victims a voice by Sam Davis

Interf. Age F p72 a Pertec Disk Speeds Up Diagnosis in an Israeli Hospital  
by Linda Folkard-Stengel

Interf. Age Jy p64 a The Bedside Microcomputer In the Intensive Care Nursery by Robert C A Goff

Interf. Age Jy p76 a Medical Applications of Microcomputers; Current and Future Technology  
by Dick Moberg

Interf. Age D p30 a Micro Medicine by Wm V Weiss

Interf. Age D p74 a It's Not a Big Miracle; Diabetes by Mathew Tukulsky

Kilobaud Je p32 a A Strategy for Healthy Living by Al Gerbens

PCW Je p61 a The Computer is just what the doctor hasn't ordered by Robert Johnson

PCW Jy p74 a Computing and Deafness by T J Allen

PCW S p57 a Microcomputers and Mental Health by John A Rope

PCW D p34 a Meet Mickie, The Well Mannered Micro, Medical Interviewing Computer  
by Nigel Bevan

Peoples Mr p34 a Microcomputer Communication for the Handicapped by Tim Scully

**MEMORY: GENERAL**

Byte Mr p186 a The Intelligent Memory Block; Adding Processors to Enhance Performance  
by Kenneth R Castleman

Byte Je p6 e Memory: The Growth of a Resource by Carl Helmers

Calc. Comp. F p27 a uComputers and Video Disc Systems: Magic Lamps for Educators? by Ludwig Braun

Comp. Dec. Mr p58 a List of MEDIA Vendors

Comp. Des. My p175 a Single Error Correcting Code Maximizes Memory System Efficiency  
by S Sanyal & K N Venkataraman

Comp. Des. S p130 a Software-Based Single Bit I/O Error Detection & Correction Scheme  
by George M White

Cr. Comput. Ja p68 a Human Memory Processes by Susan Hastings

Dig. Design Ap p40 a Semiconductor Memory Design

Dig. Design My p46 a Edge Activated Memories by Sam Young

Dig. Design O p42 a Today's Semiconductor Memories: Architecture, Applications & Processing  
by George Landers

Dig. Design O p48 a New Mass Memories: How will they impact your next design by Hank Brineen

Dr. Dobbs S p42 a Vocal Memory Dump by Phil Mork

EDN F 20 p40 a Mini mass storage, Putting the squeeze on tape and disc memories  
by John Conway

EDN S 20 p89 a Reconfigurable memory scheme suits 8 or 16 bit words by Carol A Ogden

EDN N 20 p251 a EDN Software Systems Design Course by Jack Hemenway

Electronics F 16 p117 a Digital Design: scaling new heights by Laurence Altman

Electronics O 12 p142 a Processor's PROM decoder extends addressing capabilities by Robert S Rodgers

Electronics O 26 p127 a MEMORIES, technology update by Raymond P Capece

Interf. Age Mr p100 a Computer Tutorial Part II Storage Devices Or, Memories Are Made of This  
by Roger H Edelson

Interf. Age Ap p115 a Computer Tutorial - Part III Memories Remembered by Roger Edelson

Kilobaud Ja p60 a Hardware Program Relocation the way the biggies do it by Michael Wingfield

Kilobaud Mr p74 a Back-up Techniques how fail-safe is your system? by William L Colsher

Mini Micro Ja p34 a Microcomputer Storage Media, Rundown on memory devices by Carol Ogden

Mini Micro F p32 a The Outlook for Bubble Memory Devices

Mini Micro Je p81 a A Mini Gets A Virtual Memory by Wayne L Teeter

Modern Elec D p10 a Computers: RAM? ROM? PROM? Don't Be Confused by Pete Stark

Pop. Elec. Mr p96 a Computer Bits: Microcomputer Memory by Hal Chamberlin

Spectrum Ja p36 a Technology '78, Solid State Devices: Memories and Microprocessors  
by Edward A Torrero

**MEMORY: DISKS, FLOPPY & HARD**

Byte Ja p58 a A Floppy Disk Interface by David M Allen

Byte Mr p46 c Correction for A Floppy Disk Interface (Byte Jan '78 p61)

Byte Je p94 c Correction for A Floppy Disk Interface (Byte Jan '78 p61) by Howard Oels

Byte F p114 a A Minifloppy Interface by David Allen

Byte Mr p178 a Interfacing the Sykes OEM floppy Disk Kit to a Personal Computer by Phil Hughes

Byte Je p128 a Big Disks Must Be Managed Properly by Charles A Rovira

Byte Je p174 a A Look at Shugart's New Fixed Disk Drive by Chris Morgan

## MEMORY: DISKS. FLOPPY &amp; HARD continued

Byte	D	p168	a	Partitioned Data Sets by A I Halsema
Comp. Dec.	Mr	p48	a	The Care and Testing of Disk Packs by William J Walters
Comp. Des.	My	p192	a	Floppy Disc-Based Emulator Replaces Paper Tape Reader by Kenneth W Fisher
Comp. Des.	Je	p103	a	Design Considerations for Dual-Density Diskette Controller by John Worden
Comp. Des.	S	p122	a	Design/Application Considerations of Non vs Sealed Fixed Head Disc Units by Mark Mougel
Cr. Comput.	My	p44	a	Profile: M.S.I. Floppy Disk by Steve North
Dig. Design	Ja	p24	a	the case for Ruggedized Fixed Head Disk Memories
Dig. Design	Ap	p65	a	Evaluating Eisk Drives for Optimal Cost/Performance by James L Patterson
Dig. Design	Je	p24	a	Magnetic Media Maintenance. Saves mC/uC Data by Lewis A Whitaker
Dig. Design	Jy	p26	a	Designing a PDP-11/LSI-11 Floppy Disk System by Joe Haddox
Dig. Design	Jy	p30	a	Floppy Disks-How Do They Stack Up?
Dig. Design	N	p24	a	New Magnetic Disk Cleaning Methods Save Disk & Data by Paul M Deviro
Dig. Design	D	p20	a	Hard Disk Drives by Kent Winton & James Patterson
Dig. Design	D	p30	a	Floppy Disk Drives by William R Miller
Dig. Design	D	p46	a	Magnetic Memories (media) by Robert Katzrire
Dr. Dobbs	S	p38	a	Dumping Northstar Disk Files by Titus Purdin
Dr. Dobbs	N	p40	a	Coying a Diskette on Intel Double Density DOS by Paul M Julich
EDN	My20	p129	a	Floppy-disc controller design must begin with the basics by Austin Lesea & Rodney Zaks
EDN	Je20	p98	a	Add floppies to your uC to form a real uC system by Jack E Hemenway
EDN	Ag20	p115	a	A floppy-disc interface is more than just a chip by Carol A Ogdin
Electronics	Ap13	p106	a	New arrivals in the bulk storage inventory by Laurence Altman
Electronics	N 23	p127	a	Second-generation microcontrollers take on dedicated function tasks by John Beaston
Elec. Des.	Je7	p76	a	Lower-cost hard-disc memory systems fill gaps in price & performance by Andy Santoni
Elec. Des.	Ag16	p51	a	Densities, access, reliability-good and getting better in floppies by Andy Santoni
Elec. Des.	S 13	p90	a	LSI controller makes it easier to tie a floppy drive to a computer by Subhash Bal & Mike Wright
Interf. Age	Mr	p76	a	Floppy ROM Loading Techniques by Orv Balcom
Interf. Age	Ap	p145	a	Floppy ROM Loading Techniques Part II by Orv Balcom
Interf. Age	My	p70	a	How To Load Floppy ROM #4 and Notes on IAPS by Alan Miller
Interf. Age	Ag	p20	c	Correction for FMIAPS (6800) (Interface Age May '78) by B F Sedlack
Interf. Age	My	p144	a	An Interrupt Driven Floppy Disk Controller for the S-100 Bus by Robert Wright & Chester P Quinn
Interf. Age	S	p60	a	How to Load Floppy ROM Number 5 by Bill Turner & Carl Warren
Interf. Age	N	p42	a	The Inventors Scratchpad: The Floppy Disk Jukebox by Roger Garrett
Kilobaud	F	p96	a	How Good Is Tarbell's Floppy Interface? Part 1: Overview by Larry Fukumoto
Kilobaud	Ap	p40	a	How to Make Your SWTP System Happy, give it a couple of floppies! by Mickey Ferguson
Kilobaud	My	p76	a	The North Star Floppy System. an 11-year-old can build it! by Howie DiBlasi
Kilobaud	D	p106	a	Scratched Diskette? Use the other side. by Morris J Miller
Mini Micro	N	p38	a	Floppy Disk Systems, Drive Selection Guide by Steifel
Mini Micro	N	p58	a	LSI Floppy Controller Chips by Joseph DeVita
Mini Micro	N	p64	a	Double Density Floppy Disk Controllers by Peter Moore
Per. Comput.	Mr	p72	a	Facts on Floppies (Selection Guide) by Chip A Tyeti
Per. Comput.	Jy	p89	a	Product Close-Up: North Star Micro-Disk System
Pop. Elec.	N	p104	a	How to Care for Diskettes by Leslie Solomon
73	My	p100	a	How Good Is the North Star Disk? - and why is it getting so popular by R J Bosen

## MEMORY: PROM &amp; ROM

Byte	Ja	p131	l	Getting UV Bulbs for Coffe Can Special (Byte Jan '77 p 91) by Stephen Pumple
Byte	Mr	p84	a	Program Your Next EROM in BASIC by Steve Ciarcia
Byte	Ap	p62	c	Correction for Program EROM in Basic (Byte Mar '78 p88) by Tim Walters
Byte	Jy	p11	l	Designers Beware: Some 2716 Confusion by David Marke
Byte	D	p100	a	Zapper, A Computer Driven EROM Programmer by G H Gable
Comp. Des.	Ap	p115	a	Current Semiconductor Memories by Eugene R Hnatek
EDN	Je5	p22	a	EPROM's will soon overtake PROM's as new parts, price change usage by Paul Franson
EDN	Je20	p30	a	Today's wide range of PROM programmers demands care in selection (Guide)
EDN	Ag20	p99	a	MNOS devices remember after the lights go out by Rema Reddy
EDN	N 20	p237	a	Using EAROMs with your uC requires some special tricks by Carol A Ogdin
Electronics	Mr30	p94	a	Here come the big, new 64-K ROMs by Laurence Altman
Electronics	Ap13	p119	a	Say it in a high-level language with 64-K read only memories by Rudy Langer & Thomas Dugan

## MEMORY: PROM &amp; ROM continued

Electronics	Jy6	p106	a	Single-supply erasable PROM saves power with C-MOS process by Gopal Ramachandran
Elec. Des.	Mr29	p82	a	Evaluate UV EPROM data retention to get the best unit by Robert Woods
Elec. Des.	Jy5	p40	a	ROMs and PROMs are moving to greater densities, compatibility by Dave Barnes
Elec. Des.	Jy19	p42	a	More speed, greater density keep PROMs in the game against EPROMs by Dave Barnes
Elec. Des.	S 1	p126	a	Stop dropped bits in EPROMs by John E Griffin
Interf. Age	Mr	p156	a	Software Aid for Firmware Production by Owen F Thomas
Interf. Age	D	p92	a	Vector Graphic Inc. PROM/RAM Board An Easy Storage for Overhead Programs by Roger Edelson
Interf. Age	D	p94	a	Building An Inexpensive 2708 EPROM Programmer by Darrel J VanBuer
Kilobaud	Mr	p90	a	Faster Erase Times, build a quicker EPROM eraser by Mike L Simon
Kilobaud	Ap	p98	a	Avoid Program Loading and Reloading, new 4K EPROM board from SWTP by Harley D Johnson
Kilobaud	Jy	p94	a	Simple and Low-Cost PROM Programmer by Tom Hayek
Kilobaud	S	p84	a	Kilobaud Klassroom #12; ROM and RAM Memories by Peter A Stark
Kilobaud	S	p100	a	Super Cheap 2708 Programmer by James Grina
Mini Micro	Ap	p52	a	PROM Programmers, A Guide by Jerry D Rampilberg
Mini Micro	S	p82	a	Non-Volatile Memories for Micros by Carol A Ogden
PCW	Jy	p56	a	Putting Bits In Their Place, A Simple 2708 Programmer by David Goadby
Per. Comput.	My	p87	a	PROM Boards & PROM Programmers, Waltzing Your Micro to the PROMs by Chip A Tyeti
Pop. Elec.	F	p41	a	Low-Cost EPROM Programmer 1702A by Dan Vincent
Pop. Elec.	Mr	p55	a	Low-Cost EPROM Programmer Part 2 by Dan Vincent
Radio Elec.	D	p43	a	Making PROM's Work For You by Robert H Penoyer

## MEMORY: RAM

Byte	Jy	p42	a	Who's Afraid of Dynamic Memories? by Lane T Hauck
Comp. Des.	Ja	p117	a	DMA Controller Capitalizes on Clock Cycles to Bypass CPU by Joseph Nissim
Comp. Des.	F	p164	a	Magnetic Bubble Memory Devices & Applications by Eric R Garen
Comp. Des.	Ap	p115	a	Current Semiconductor Memories by Eugene R Hnatek
Comp. Des.	Ag	p122	a	Interfacing Fundamentals: The 8085 Family of Memory Devices by C Titus, J Titus, D Larsen & P Rony
Comp. Des.	Ag	p140	a	An Add-in Recognition Memory for S-100 Bus Microcomputers by Sydney Lamb
Comp. Des.	S	p162	a	An Add-In Recognition Memory for S-100 Bus Microcomputers Struc. & Specs by Sydney Lamb
Comp. Des.	O	p136	a	LSI Bipolar FIFO Memory Increases Periperal Controller Speed by Paul Chu
Comp. Des.	O	p182	a	An Add-In Recognition Memory for S-100 Bus uComputers, Applications by Sydney Lamb
Dr. Dobbs	Ag	p41	l	Fix and Manual Correction for Processor Tech's GPM by Ed Elizondo
EDN	F 20	p85	a	Build a versatile memory system that accepts 4k or 16k RAM's by David Wooten
EDN	Mr20	p49	a	Expand FIFO arrays with minimum speed loss by Krishna Rallapalli
EDN	Ap5	p44	a	Add-in memories, recent chip developments produce system improvements by Paul G Schreier
EDN	Ap5	p120	a	On-board backup supply protects volatile RAM data by F Robert Quinlivan
EDN	O 20	p82	a	Safe supply manages MOS memories by Robert Pease
Electronics	F 2	p109	a	System design with dynamic memories takes attention to detail by Stephen Calebotta
Electronics	F 16	p80	a	65-K RAMs won't slight performance by Laurence Altman
Electronics	Ap13	p106	a	New arrivals in the bulk storage inventory by Laurence Altman
Electronics	Je22	p133	a	CCDs bring solid-state benefits to bulk storage computers by Bruce Threewitt
Electronics	Ag17	p107	a	Dual-port RAM hikes throughput in I/O controller board by Craig Kinnie & Michael Maerz
Electronics	S 28	p109	a	64K dynamic RAM needs only one 5 volt supply to outstrip 16K parts by G R Mohan & John Hewkin
Elec. Des.	F 1	p34	a	Forget the bugs in 4k and 16k RAMs-the big news is at 64k by Andy Santoni
Elec. Des.	Ap26	p84	a	Keep the memory interface simple between dynamic RAMs and a uP by Gary Fielland & Ken Oishi
Elec. Des.	My10	p130	a	Avoid losing data when line power returns to battery backup RAM syst. by Alan W Barman
Elec. Des.	Jy19	p80	a	Add a standby battery to a RAM and make a nonvolatile memory by Patrick W Boyle & Robert F Wentin
Elec. Des.	Ag2	p41	a	Wide-word RAMs are smart enough to work with the latest uPs by Sheff Eaton, Dave Huffman & Ward Parkinson
Elec. Des.	Ag2	p76	a	Charge-coupled devices for bulk storage make sense by Charles B Mitchell
Elec. Des.	Ag16	p88	a	Single-chip CCD memory really delivers: 64kbit TMS3064 by David Sitrick
Elec. Des.	S 13	p64	a	Single-supply 16-k dynamic RAM is ready for denser systems by Edward Metzler & James Oliphant

**MEMORY: RAM continued**

Elec. Des.	S 27	p27	a	64-k dynamic RAMs are here with high speed, low power by Dave Bursky
Elec. Des.	D 20	p72	a	Take the 'dynamics' out of dynamic RAMs with an IC controller by Bruce McCormick & Craig Peterson
Interf. Age	My	p156	a	Computer Tutorial Part IV More Memories by Roger H Edelson
Interf. Age	Jy	p104	a	Computer Tutorial-Memories; CCD, Magnetic Bubbles or Buckets and Bubbles by Roger Edelson
Interf. Age	D	p92	a	Vector Graphic Inc. PROM/RAM Board An Easy Storage for Overhead Programs by Roger Edelson
Kilobaud	Ja	p42	a	Has Godbout Done It Again? Econoram II: \$150 assembled by Mark Garetz
Kilobaud	F	p32	a	In Search of Memory Vandenberg Data Products 16K board reviewed by Heinz Gf. Matuschka
Kilobaud	Mr	p73	a	Protect Your Memory against power failure by Charles R Carpenter
Kilobaud	Ap	p80	a	Blue is the Color. Solid State Music is the company (Memory, video, etc) by Joe Kasser
Kilobaud	S	p84	a	Kilobaud Klassroom #12; ROM and RAM Memories by Peter A Stark
Micro	O	p12	a	MDS 16K RAM for the Apple II by Allen Watson
Mini Micro	D	p71	a	Add-On Memories by Malcolm L Stiefel
Per. Comput.	F	p44	a	Big Memories for Micros (Selection Guide) by Chip A Tyeti
Pop. Elec.	Ja	p67	a	Experimenter's Corner: Read/Write Memories (RAM's), Part 2 by Forrest M Mims
Spectrum	Ap	p22	a	An Update: CCD and Bubble Memories by Dean Toombs
Spectrum	My	p36	a	CCD & Bubble Memories: System Implications by Dean Toombs
73	Ap	p102	a	Godbout Strikes Again - ECONORAM: an outstanding value by Rod Hallen
73	Jy	p110	a	RAMmed By Morrow - ECONORAM III lauded by Rod Hallen

**MEMORY: TAPE, MAGNETIC & PAPER**

Byte	Ja	p161	a	Mounting a Paper Tape Reader by Jack Bryant
Byte	Jy	p162	a	How to Get Your Tarbell Going by Larry Weinstein
Byte	N	p146	c	Correction for: Getting Your Tarbell Going (Byte July '78 p 164)
Byte	O	p142	a	A Simpler Digital Cassette Tape Interface by Ralph W Burhans
Byte	N	p160	a	A Cassette Interface Switching Box for the TRS-80 by Craig Anderton
Dig. Design	Ja	p22	a	Calculator Program Aids Tape Drive Design
Dig. Design	Mr	p56	a	Phase Encoding in Digital Cassette Recording by Maqsood Mohd
Dig. Design	Je	p24	a	Magnetic Media Maintenance. Saves mC/uC Data by Lewis A Whitaker
Dig. Design	Jy	p16	a	Error Detection and Correction for Mag Tape Recording by Anthony P Herff
Dig. Design	Jy	p20	a	Use Tape Drives for more storage by Peter A Gilbody
Dig. Design	Jy	p98	a	Need Low-Cost Data Storage? Try Mini-Cassettes by R M Duffy
Dig. Design	D	p34	a	Reel to Reel Tape Drives by Bill Barton & Marty Gray
Dig. Design	D	p40	a	Cartridge Tape Drives by Robert Von Behren
Dig. Design	D	p46	a	Magnetic Memories (media) by Robert Katzrire
Dig. Design	D	p50	a	Digital Tape Subsystems by Lewis Frauenfelder & Dick Van Pelt
Dr. Dobbs	Je	p18	a	AUTODUMP: A Memory Dumper for POLY88 Tape System by Richard B Emerson
Dr. Dobbs	Je	p24	a	High Speed Cassette I/O for the KIM-1 by Theodore E Bridge
Dr. Dobbs	Ag	p31	a	Fast Cassette Interface for the 6502 by Carl Moser
Dr. Dobbs	Ag	p42	a	Custom File Routines for ALS-8 by Larry Marek
EDN	F 5	p39	a	Low-cost system requirements multiply interface headaches (tape control) by Paul G Schreier
EDN	Mr20	p101	a	A tape-to-uC-hardware interface requires a wealth of utechniques by John Conway
EDN	My5	p75	a	Standard 3M recording technique could spur low-cost uC use (tape) by Joel A Kramer
EDN	Ag5	p107	a	Digital cassette tape drives boost uC system versatility by Jack E Hemenway
Electronics	Je8	p122	a	Processor to cassette interface helps slash data storage cost by Pawell Mikulski
Electronics	Ag31	p124	a	Time-encoding system formats cassette tapes by Fathi Saleh
Elem. Elec.	Mr	p42	a	Kansas City Computing, Paper and Magnetic Tape Techniques by Herb Friedman
Elem. Elec.	N	p75	a	e/e checks out the...PERCOM CIS-30 Recorder Interface
Interf. Age	Ja	p104	a	Turning Toward MECA (Tape Drive and Control) by Carl Denver WarrenII
Interf. Age	F	p144	a	TAPEMON: An 8080 Binary Tape Monitor by Alan R Miller
Interf. Age	Mr	p76	a	Floppy ROM Loading Techniques by Orv Balcom
Interf. Age	Ap	p145	a	Floppy ROM Loading Techniques Part II by Orv Balcom
Interf. Age	My	p70	a	How To Load Floppy ROM #4 and Notes on IAPS by Alan Miller
Interf. Age	Ag	p20	c	Correction for FMIAPS (6800) (Interface Age May '78) by B F Sedlack
Interf. Age	Je	p146	a	IAPS: International ASCII Publication Standard; Making Tapes on 8080 Sys by Alan R Miller
Interf. Age	S	p96	a	Heathkit Model H10 Paper Tape Reader/Punch. A Review by Roger Edelson
Interf. Age	N	p90	a	Interface An MPU to a Cassette Tape Recorder by John Wharton
Kilobaud	Ja	p106	a	One Byte at a Time with Morrow's I/O cassette board by Gary Alevy
Kilobaud	F	p19	l	How About a "Hyper" ACR? by Joe McCarty

## MEMORY: TAPE, MAGNETIC &amp; PAPER continued

Kilobaud	Mr	p34	c	Correction for Hyper About Slow Load Times (Kilobaud Nov '77 p68)
Kilobaud	Mr	p40	a	Hear It and See It! foolproof cassette operation by Stephen Gibson
Kilobaud	Ap	p64	a	Memory Debugging, which chip is it? by Albert Brunelli
Kilobaud	My	p110	a	Cassette Recorder Disaster: Ground Loops, the problem, and a solution by Dave Waterman & Dave Lien
Kilobaud	Ag	p48	a	Kansas City Standard—At 1200 Baud by Rod Hallen
Kilobaud	Ag	p94	a	Copying Computer Cassettes by Peter A Stark
Kilobaud	S	p106	a	Something Extra in Mass Storage, Alpha 1 Tape Unit by Heinz Gf. Matuschka
Kilobaud	O	p96	a	The Software Patchcord, Software fix for tape duplication problems by Marc I Leavay
Kilobaud	D	p44	a	The Care and Feeding of Cassette Tapes by Lewis Tarnopol
Kilobaud	D	p70	a	Two Interface Boards from Teletek; Serial, Tape by Mitchell Wolrich & Jeff DeTray
Micro	O	p39	a	Cassette Tape Controller by Fred Miller
Micro	D	p35	a	SYM-1 Tape Directory by John Gieryic
PCW	Jy	p59	a	PUNCH LINES. Interfacing a Westrex Punch to a 6800 System by Mark Colton
PCW	D	p64	a	A High Speed Cassette Interface by Bob Cottis & Mike Blandford
Peoples	Jy	p44	a	Tape Talk (PET) by Phyllis Cole
Pop. Elec.	N	p94	a	A Cassette Control System for Computers (TRS-80) by A A Mangieri
73	My	p112	a	Semi-Instant Program Loading - bauding up the SWT 6800 by Jack G Starr

## MEMORY: TEST

Byte	O	p12	a	A Memory Sensitivity Test by Don Kinzer
Byte	O	p58	a	Testing Memory in BASIC by Russell E Adams
Dr. Dobbs	Ja	p4	a	Memory Test for 6502 by Carl Moser
Dr. Dobbs	My	p28	a	Resident Memory Test Systems: With an Example for the 6800 by Terry Ritter
Dr. Dobbs	Ag	p39	l	M6809 Memory Test by Kenneth Drexler
EDN	S 5	p72	a	8080 routine performs memory check by Fred Gutman
Electronics	D 21	p119	a	A quick march checks memory (6800) by A James Laurino
Elec. Des.	S 13	p118	a	Speed 4-k or 16-k RAM evaluation with a low-cost raster scan tester by Jim Lockhart
Kilobaud	Jy	p70	a	It's Here: Cook's Memory Test 8080 by Rod Hallen
Micro	O	p25	a	A Memory Test Program for the Commodore PET by Michael J McCann
73	S	p112	a	RAM Checkout's A Snap - this tiny program does the job by Rod Hallen

## MICROCOMPUTERS: GENERAL

Byte	Jy	p124	a	How to Choose a Microprocessor by Lou Frenzel
Byte	O	p65	a	In Defense of Analog? (Analog Computers) by F D Sodemann
Cr. Comput.	Ja	p41	a	How Would You Like a 16-Bit Computer? by Webb Simmons
Cr. Comput.	N	p44	a	Operating Systems Q & A by John Craig
Dig. Design	D	p100	a	Microcomputers
Electronics	S 28	p85	a	Soviet computers: better than expected by Anthony Durniak
Electronics	O 26	p138	a	Technology update, Microprocessors and Microcomputers by Raymond P Capece
Electronics	O 26	p152	a	Technology Update: Computers (large) by Anthony Durniak
Interf. Age	F	p46	a	...From the Fountainhead by Adam Osborne
Interf. Age	Mr	p34	a	...From the Fountainhead by Adam Osborne
Kilobaud	O	p90	a	View from the Far East by Art Becker
Mini Micro	Mr	p30	a	The Chinese Micro Is Coming by Bohdan O Szuprowicz
Mini Micro	D	p46	a	Technology Trends in Desktop Computers by Edward Ross & Lewis Solomon
Modern Elec	Jy	p20	a	Home Computers: what's new for you by Bob Margolin
PCW	My	p55	a	Direct Addressing: Where to get your Personal Computer, Hard-& Soft-ware by John Coll
Pop. Elec.	Je	p110	a	Computer Bits by Leslie Solomon
Radio Elec.	Je	p38	a	Personal Computers Are They Right For You? by William Barden
Radio Elec.	Je	p43	a	Peripherals—arms and legs by Karl Savon

## MICROCOMPUTERS: DESIGN

Byte	My	p104	a	How to Multiply in a Wet Climate Part 2: Design Details by Jack Bryant & Manot Swasdee
Byte	Jy	p60	a	The Z-80 in Parallel by Bob Loewer
Byte	D	p26	a	Designing a Universal Turing Machine; A Software Approach by Thomas Munnecke
Comp. Des.	Ja	p117	a	DMA Controller Capitalizes on Clock Cycles to Bypass CPU by Joseph Nissim
Comp. Des.	Mr	p81	a	Design Motivations for Multiprocessor uComputer Systems by George Adams & Thomas Rolander
Comp. Des.	S	p101	a	Designing Interrupt Structures for Multiprocessor System by Rajen Jaswa
Comp. Des.	D	p77	a	Integrating Peripherals Into Processing Systems by Reinholdt J Eufinger

## MICROCOMPUTERS: DESIGN continued

Dig. Design	Ja	p40	a	Microcomputers part 2: The Development System
Dig. Design	Ap	p33	a	Programmable Controllers, Push uCs Beyond 64 Interrupts by John Beaston
EDN	My5	p119	a	Multiprocessor uP systems present advantages and pitfalls by Howard Raphael
EDN	N 20	p251	a	EDN Software Systems Design Course by Jack Hemerway
EDN	N 20	p313	a	Ten Proven design rules maximize your uSystem successes by John Conway
Electronics	My11	p132	a	Managing the flow of data is easy with programmable multiplexer by Dave Wyland
Electronics	Jy6	p98	a	Minicomputer architecture links past and future generations by Peter Christy
Elec. Des.	Ja4	p126	a	Build a microprocessor-development system by Dr William Wilke
Elec. Des.	Mr15	p72	a	Multiprocessing boosts microcomputer power dramatically. by Kalman Rozsa
Elec. Des.	Ap26	p96	a	Improved uP interrupt capability gives efficient access to peripherals by Masatoshi Shima & Roy Blacksher
Elec. Des.	My24	p238	a	Multiprocessing adds muscle to uPs by Dan Moss
Elec. Des.	S 13	p106	a	Weigh hardware and software options to optimize your uP design solutions by Patrick H Stakem
Elec. Des.	O 11	p226	a	Make the most of bit-slice flexibility & design High perf. processors by Richard L Horton, Larry Coopersmith & Robert Bergler
Elec. Des.	D 6	p60	a	Can an uC development system be 200 times more powerful than another? by Max J Schindler
Kilobaud	F	p16	a	uComputers/uProcessors: Hardware, Software & Applications by Hilburn & Julich
PCW	D	p16	a	Microcomputer Architecture by Patrick Sutton
PCW	D	p21	a	Hints on System Design by Mike Dennis
Pop. Elec.	My	p56	a	Micro-Processor Microcourse Part 3 Memories, Buses & uP Organization by Forrest M Mims
Pop. Elec.	Je	p48	a	Micro-Processor Microcourse Part 4 PIP-2 Educational Microprocessor by Forrest M Mims
Pop. Elec.	Jy	p67	a	Micro-Processor Microcourse Part 5: The Control Section of PIP-2 by Forrest M Mims

## MICROCOMPUTERS: FUNDAMENTALS

CQ	Mr	p24	a	Computers... How They Function by Theodore J Cohen
Calc. Comp.	Ja	p90	a	The Inside Story About Personal Computers Part 3 by Bob Albrecht
Calc. Comp.	F	p92	a	The Inside Story About Personal Computers by Bob Albrecht
Calc. Comp.	Mr	p76	a	The Inside Story About Personal Computers Part 5 by Bob Albrecht
Cr. Comput.	Ja	p45	a	Topics in Logic, Turing Machines by John Lees
Cr. Comput.	N	p49	b	Small Computer Systems for Business by Gerald A Silver
EDN	Ap5	p111	a	Interactive intelligence--the key to competitive uP-based products by Robert H Cushman
Elem. Elec.	S	p35	b	Microprocessors from Chips to Systems by Rodnay Zaks
Interf. Age	F	p42	a	Programming the Human Computer: Microcomputer Courses by Merl Miller
Interf. Age	F	p92	a	Computer Tutorial Part I An Introduction to the World of Home Computers by Roger Edelson
Interf. Age	F	p138	b	An Introduction to Microcomputers Vol 0, The Beginner's Book by Adam Osborne
Interf. Age	Ap	p140	b	Getting Involved With Your Own Computer by Leslie Solomon & Stan Veit
Kilobaud	Ja	p60	a	Hardware Program Relocation the way the biggies do it by Michael Wingfield
Kilobaud	Ap	p12	b	An Introduction to Microcomputers Vol II by Osborne, Jacobsen, Kane
Kilobaud	My	p16	b	An Introduction to Microcomputers Volume 0, The Beginners Book by Adam Osborne
Kilobaud	Je	p12	b	Home Computers: Questions and Answers by Rich Didday
Kilobaud	Je	p92	a	Two Systems Sharing the Same Bus by Mark Boyd
Kilobaud	Jy	p12	a	Introduction to Microcomputers & Microprocessors by Arpad Barna & Dan I Porat
PCW	S	p16	a	So You're Interested In Personal Computing by Brian Hewart
PCW	N	p42	b	An Introduction to Microcomputers by Adam Osborne
Peoples	Mr	p14	b	An Introduction to Microcomputers Vol. 0 The Beginners Book by Adam Osborne
Per. Comput.	Ja	p24	a	Scaling the Cliffs of Computer Mastery Part I by Ramond Howell
Per. Comput.	Je	p21	a	Microcomputers in One Easy Lesson

## MICROCOMPUTERS: SELECTION GUIDES

Byte	Jy	p124	a	How to Chose a Microprocessor by Lou Frenzel
CQ	F	p29	a	Computers...Do You Really Want One? by Robert L Stites
Cr. Comput.	Ja	p41	a	How Would You Like a 16-Bit Computer? by Webb Simmons
Cr. Comput.	S	p102	a	Considerations in Buying a Personal Computer by Karl L Zinn
Cr. Comput.	N	p70	a	Smart Electronic Games and Video Games by David H Ahl
Cr. Comput.	N	p76	a	First Annual Buyer's Guide to Consumer Computers by Steve North
Dig. Design	Mr	p68	a	What You Should Know About Selecting a uC by Alex Goldberger
Dig. Design	Ag	p18	a	Minis or Micros? It's the application that really counts (DEC) by Jack MacKeen
Dig. Design	Ag	p42	a	Minis vs Micros, OEM Decision-Making Risks Grow by Richard Davis
EDN	Ap20	p24	a	Personal Computers: Expensive toys or efficient problem solvers? by Sam Davis
EDN	N 20	p205	a	As the uC-board market shakes out... uC Board selection guide by Robert M Grossman

## MICROCOMPUTERS: SELECTION GUIDES continued

Elec. Des.	Ja18	p24	a	Time was when a mini was a mini. micro was a micro and picking was easy by Max J Schindler
Elec. Des.	My24	p82	a	Microcomputer Data Manual (board selection guide)
Elec. Des.	Je21	p86	a	Microcomputers: Single-chip or single-board? by Terry Benson
Elem. Elec.	N	p22	a	Choose a Computer as Logically as if You Were a Computer too! by Neil Shapiro
Interf. Age	Je	p32	a	...From the Fountainhead; Selecting a System by Adam Osborne
Interf. Age	Jy	p90	a	Computer Implementation In A Small Business; Selecting Computer Hardware by Roger Williams
Interf. Age	O	p61	a	1978 INDEX Microcomputer and Minicomputer Hardware
Mini Micro	My	p70	a	Who's Who In Personal Computers by Adam Osborne
Mini Micro	Jy	p29	a	SuperMinis: Selection Guide by Malcolm L Stiefel
Mini Micro	O	p63	a	Configuring an LSI-11 System Selection guide by William L Palya
PCW	N	p52	a	Benchmarks Again and Connections by John Coll
Per. Comput.	F	p41	a	Bewitched, Bothered and Bewildered? Selecting a Micro with these ideas by William Miller
Per. Comput.	N	p60	a	A Feast of Microcomputers by Morris Firebaugh, Luther Johnson & William Stone
ROM	Ja	p58	a	Home Computers A Look at What's Coming by Jules H Gilder
Radio Elec.	F	p45	a	Hobby Computer Main-Frames by Chester H Lawrence
Radio Elec.	Mr	p70	a	Hobby Computer Mainframes
Radio Elec.	Ap	p51	a	On The S-100 Bus (Selection Guide)
Radio Elec.	Je	p59	a	Personal Computers Directory
Spectrum	S	p30	a	Personal Computers for the Entrepreneur by Don Mennie

## MICROCOMPUTERS: ALTAIR

Byte	Jy	p119	a	Beating North Star--MITS Incompatibility (Load MITS BASIC on N. Star) by Alan R Miller
Cr. Comput.	Mr	p122	a	Inventory Control: Altair Software Distribution Co.
Kilobaud	Mr	p92	a	I/O Programming for the Altair Disks ain't no big deal by Don Alexander
Kilobaud	Jy	p74	a	Eliminating Finger Blisters, replacement front panel by Peter W Sargent
Kilobaud	O	p20	c	Correction to Altair Compatibility (Kilobaud July '78)

## MICROCOMPUTERS: APPLE

Byte	Mr	p18	a	An Apple to Byte; One User's Review of the Apple II by Carl Helmers
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Cr. Comput.	Jy	p28	a	Profile: Apple II Computer by Steve North
Cr. Comput.	Jy	p30	a	High-Resolution Graphics for the Apple II by Gary D Dawkins
Cr. Comput.	N	p46	a	Apple-Cart by Richard A Milewski
Dr. Dobbs	Mr	p4	a	Renumbering & Appending BASIC Programs on the Apple II Computer by Steve Wozniak
Dr. Dobbs	Je	p31	a	LAZARUS. Program to Resurrect BASIC Programs on the APPLE-II Computer by Andy Hertzfeld
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Kilobaud	N	p62	a	The Remarkable Apple II by Robert J Bishop
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Micro	F	p13	a	Printing with the Apple II, Telpar PS-40-3C by C R Carpenter
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Micro	F	p28	a	The Apple II Power Supply Revisited by Rod Holt
Micro	Ap	p32	a	A Worm in the Apple? by Mike Rowe
Micro	Ap	p45	a	An Apple-II Programmer's Guide by Rick Auricchio
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Micro	Je	p21	a	A Slow List for APPLE BASIC by Bob Sander-Cederlof
Micro	Je	p44	a	Apple II Accessories and Software by Chuck Carpenter
Micro	Ag	p11	a	Shaping Up Your Apple by Michael Faraday
Micro	Ag	p15	a	Apple Pi by Robert J Bishop
Micro	Ag	p33	a	Brown and White and Colored All Over (Apple Color) by Richard F Suitor
Micro	Ag	p45	a	APPLE Integer BASIC Subroutine Pack and Load by Richard F Suitor
Micro	O	p31	a	Apple Calls and Hex-Decimal Conversion by Marc Schwartz
Micro	O	p43	a	Apple II High Resolution Graphics Memory Organization by Andrew E Eliason
PCW	D	p41	a	An Apple II Page 1 Map by M R Connolly
Peoples	Ag	p50	a	Colour Is An Apple II, PCW Review by John Coll & Charles Sweeten
Per. Comput.	My	p14	a	APPLE II by Phyllis Cole
Per. Comput.	Je	p99	a	Product Close Up: The Apple II Microcomputer

## MICROCOMPUTERS: ELF &amp; VIP

Dr. Dobbs	S	p47	1	COSMAC Elf. Experience and Comparisons by John B Palmer
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Pop. Elec.	F	p65	a	How to Upgrade a Basic ELF Microcomputer by Edward M McCormick
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73	F	p82	a	Put An Elf In Your Keyer - sneaky computer strikes again by Jeff Duntemann

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Byte	Mr	p185	a	Get On at the Right Address (Bootstrap for the 8080) by Frank S Holman
Byte	Mr	p186	a	The Intelligent Memory Block; Adding Processors to Enhance Performance by Kenneth R Castleman
Byte	Ap	p28	a	Part 1: Use and Basis for a Design (About TRW MPY-8AJ-M Multiplier Chip) by Jack Bryant & Manot Swasdee
Byte	S	p147	a	Making an H9 Understand Lower Case by George J Frye
Byte	O	p70	a	PAM/8: A New Approach to Front Panel Design by Gordon Letwin
Byte	O	p130	a	Assembling the H9 Video Terminal by Terry T Steeden
Byte	N	p158	a	Product Description: Heath Microprocessor Training System by W N Hubin
Cr. Comput.	Ja	p38	a	Equipment Profile: Heath H-8 System by John Lees & Steve North
Dr. Dobbs	Ja	p3	c	The Heath H-8 "Evaluation": I Think We Blew It (DDJ Oct '77 p10) by Jim C Warren
Dr. Dobbs	Ja	p5	l	Consarn That H-8! by Craig A Pearce
Dr. Dobbs	S	p30	a	MAKING A NEW case FOR THE HEATH H-9 TERMINAL by Howard L Nurse
Dr. Dobbs	N	p22	a	The Heath H-8 System by Tom Williams
Elem. Elec.	N	p61	a	e/e checks out the...Heathkit H8 Home Computer
Interf. Age	Je	p102	a	Using the Heathkit H8 System in Home. and Business Applications by Richard S Arnold
Interf. Age	Je	p128	a	A Buyer's and Builder's Guide to the Heathkit H8 System by Richard S Arnold
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Interf. Age	D	p108	a	A Review of the Heath H11 Microcomputer by Barry A Andrews
Kilobaud	Ja	p15	a	The Heathkit Forum by Charles Floto
Kilobaud	Je	p46	a	Baudot...er...Murray. Meet the H8 by Howard L Nurse
Kilobaud	Ag	p70	a	The Do-It-Yourself System: Heath's H8 Is a Winner! by Robert M Morgan
Kilobaud	S	p52	a	The Heath/DEC Connection (Part 1: Overview of the H11 System) by Steven B Lionel
Kilobaud	O	p36	a	The Heath/DEC Connection (Part 2) H10, H9 by Steven B Lionel
Modern Elec	Je	p26	a	First Impressions: using the Heathkit home computer H8 by Carmine W Prestia
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Peoples	Jy	p12	a	H-8 Revisited by Tom Williams
Per. Comput.	Ag	p37	a	Building a Benton Harbor Micro by Bill & Katha Endress

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Byte	F	p62	a	SWEETS for KIM; A Low Calorie Text Editor by Dan Fylstra
Byte	N	p146	c	Correction: Sweets for KIM Spurned (Byte Feb '78 p62) by Ernst Schumacher
Byte	Jy	p12	a	KIMER: A KIM-1 Timer by Robert Baker
Byte	O	p156	c	Timely Comments On KIM (Reference to Byte July '78 p12) by Charles H Parsons
Byte	S	p123	a	Plugging the KIM-2 Gap by M Garth Notley
Cr. Comput.	My	p79	b	The First Book of KIM and other KIM Related Books
Cr. Comput.	N	p104	a	GAMES--NOT JUST FOR FUN Unvarnished Truth About KIM? by Jim Butterfield
Dr. Dobbs	Mr	p13	a	A KIM Binary Calculator by John Eaton
Dr. Dobbs	My	p34	a	EDITHA, A Revision of the Fylstra KIM-1 Editor Program by H T Gordon
Dr. Dobbs	Je	p24	a	High Speed Cassette I/O for the KIM-1 by Theodore E Bridge
Dr. Dobbs	S	p33	a	A Programmable IC Tester for KIM by Joel Swank
Ham Radio	N	p74	a	uP: IC Tester Using the KIM I by Robert E Babcock
Kilobaud	Ja	p36	a	Growing with KIM expansion PC board by John Eaton
Kilobaud	Mr	p34	c	Correction for Growing with KIM (Kilobaud Jan '78 p 39)
Kilobaud	F	p16	b	The First Book of KIM by Butterfield, Ockers & Rehne
Kilobaud	F	p68	a	Expand Your KIM! Part 3: bus control board and memory by John Blankenship
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Kilobaud	My	p60	a	Expand Your KIM Part 5: A/D interfacing (for joysticks!) by John Blakenship
Kilobaud	Jy	p60	a	A Sensible Expansion: Atwood Memory for your KIM by David Swindle
Kilobaud	S	p58	a	Do-It-All Expansion Board for KIM by George Young
Kilobaud	O	p26	a	Budget System with KIM by Jim Trageser
Kilobaud	N	p60	a	Do It with a Kimsil by Rick Grossman
Micro	Ja	p14	b	The First Book of KIM
Micro	Ja	p25	a	Improving KIM-1 Keyboard Reliability
Micro	Ja	p27	a	Important Addresses of KIM-1 and Monitor by William R Dial
Micro	F	p3	a	Employing the KIM-1 Microcomputer as a Timer and Data Logging Module by Marvin L DeJong
Micro	F	p38	a	Lighting the KIM-1 Display by Marvin L DeJong
Micro	Ap	p43	a	A KIM Beeper by Gerald C Jenkins
Micro	Je	p24	c	Correction or A KIM Beeper (Micro Apr '78 p43)
Micro	Je	p39	a	A Block HEX Dump and Character Map Utility Program for the KIM-1 by J C Williams
Micro	Ag	p25	a	A Debugging Aid For The KIM-1 by Albert Gaspar
PCW	Ag	p24	a	A Mighty Micromite: The KIM-1 Evaluation Unit by C Corbett
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73	F	p68	a	KIM-1 Can Do It! by Clifton W Pittelkau
73	F	p76	a	Looking or A Micro?—Consider the KIM-1 by Francis J O'Reilly
73	Ap	p84	a	The exterminator - for buggy KIMs by Dana Lasher
73	Ap	p92	a	Now Anyone Can Afford A Keyboard - surplus keyboard, KIM, and software by John Eaton
73	Ag	p100	a	The Kalculating KIM-1 - calculator versatility for any KIM by Dana Lasher
73	D	p170	a	RTTY with the KIM --one more step by Kim H Lantz

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Byte	Jy	p119	a	Beating North Star--MITS Incompatibility (Load MITS BASIC on N. Star) by Alan R Miller
Byte	O	p141	a	Converting North Star's Deletion Characters by Alan R Miller
Cr. Comput.	N	p54	a	Profile: The "Most-Software" Machine..North's Star Complete Sys: Horizon by John Craig
Dr. Dobbs	S	p38	a	Dumping Northstar Disk Files by Titus Purdin
Interf. Age	Je	p153	a	The Westminster XEK Assembler for the North Star Disk by Alan R Miller
73	My	p100	a	How Good Is the North Star Disk? - and why is it getting so popular by R J Bosen

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Cr. Comput.	My	p42	a	Profile: OSI Challenger IIP by Neil Shapiro
Dr. Dobbs	Ja	p6	l	Challenging Challenger's ROMs, 6502 Disassembler by Stephen P Smith
Dr. Dobbs	Mr	p3	c	6502 Disassembler Fix (DDJ Jan '78) by Stephen P Smith
Dr. Dobbs	Ag	p39	c	Yet Another 6502 Disassembler Fix (DDJ Jan '78 p6) by Bennett Meyer
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Byte	Mr	p114	a	User's Report: The PET 2001 by Dan Fylstra
Byte	Ag	p121	l	PET Bug? (Othello Program in Byte Oct '77 p 60) by Mike Hughes
Calc. Comp.	Mr	p23	a	Computers for Parents and Teachers (PET) by Bob Albrecht
Calc. Comp.	My	p78	a	Sources of Programs for PET and TRS-80 Computers (List of Neslettters)
Calc. Comp.	S	p34	a	Marblestat (PET Game) by Mac Oglesby
Calc. Comp.	S	p37	a	Loops (PET Game) by Jim Wilson
Calc. Comp.	N	p36	a	SINNERS (PET) by Mac Oglesby
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Cr. Comput.	Jy	p24	a	Profile: Commodore PET by Ludwig Braun
Cr. Comput.	S	p68	a	Profile: PET Cassettes from Peninsula School by Steve North
Cr. Comput.	N	p40	a	Personal Electronic Transactions by Gregory Yob
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Kilobaud	My	p22	a	PET's First Report Card, an objective evaluation by Ralph Wells
Micro	Ja	p9	a	Meet the PET by Charles Floto
Micro	Ja	p17	a	The PET Vs. the TRS-80 by Bob Wallace
Micro	F	p9	a	The PET Vet Tackles Data Files by Charles Floto
Micro	Ap	p5	a	The PET Vet Examines Some BASIC Idiosyncrasies by Charles Floto
Micro	Ap	p22	a	Early PET-Compatible Products by Charles Floto
Micro	Ag	p5	a	Design of a PET/TTY Interface by Charles R Husbands
Micro	Ag	p17	a	A Simple 6502 Assembler for the PET by Michael J McCann
Micro	Ag	p41	a	PET Composite Video Output by Cal E Merritt

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Micro	Ag	p42	a	Power from the PET by Karl E Quosig
Micro	Ag	p49	a	A Partial List of PET Scratch Pad Memory by Gary A Creighton
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Micro	O	p47	a	PEEKING at PET's BASIC by Harvey B Herman
Micro	D	p23	a	Continuous Motion Graphics or How to fake a Joystick with the PET by Alan K Christensen
Micro	D	p39	a	Inside PET BASIC by Jim Butterfield
PCW	Je	p32	a	Commodore's Approach to Computing by Kit Spencer
PCW	Je	p44	a	PET 2001 Review by John Coll
PCW	O	p54	a	PET Preening by Gordon Bell
PCW	N	p49	a	Plan for a Plotter by R I Elliot
Peoples	Ja	p16	a	SPOT; The Society of PET Owners and Trainers by Phyllis Cole
Peoples	Mr	p55	l	SPOT. The Society of PET Owners and Trainers
Peoples	My	p43	b	PET Software Review by Don Alan
Peoples	Jy	p44	a	Tape Talk (PET) by Phyllis Cole
Peoples	S	p16	a	Snooping with your PET, PEEKING & POKEing Around by Mark Zimmerman
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Per. Comput.	My	p94	a	PET FILES; Things your user's manual never told you by Michael Tulloch
Per. Comput.	D	p42	a	Assembler for the PET by Mark Zimmerman
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73	N	p142	a	"Look What Followed Me Home!" —a PET of your very own by Paul A Lillie

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Cr. Comput.	Mr	p106	a	Inventory Control: PolyMorphic Systems by Don Williams
Cr. Comput.	S	p44	a	PolyMorphic 8813 by Steve North
Dr. Dobbs	Je	p18	a	AUTODUMP: A Memory Dumper for POLY88 Tape System by Richard B Emerson
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Byte	Ap	p49	a	The Radio Shack TRS-80: An Owner's Report by Dan Fylstra
Byte	N	p160	a	A Cassette Interface Switching Box for the TRS-80 by Craig Anderton
CQ	Je	p27	a	CQ Reviews: Radio Shack TRS-80 Microcomputer by Robert L Stites
Calc. Comp.	Mr	p29	a	The TRS-80: A Lot of Computer for \$400 by Don Irman
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Calc. Comp.	S	p9	a	My TRS-80 Likes Me by Bob Albrecht
Calc. Comp.	S	p48	a	TRS-80: What's Behind Bars? by Don Irman
Calc. Comp.	S	p58	a	Number Patterns on the TRS-80 by Bob Albrecht
Calc. Comp.	N	p12	a	The TRS-80 Draws Straight Lines at ODD Angles by Don Irman
Calc. Comp.	N	p58	a	The TRS-80 as a Classroom Teaching Tool by Samuel W Spero
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Comp. Dec.	F	p14	a	Getting Personal. Ride in the back of the bus (About the TRS-80) by Alan Kaplan
Cr. Comput.	Ja	p35	a	Equipment Profile: Radio Shack TRS-80 by Stephen B Gray
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Cr. Comput.	S	p48	a	Radio Shack TRS-80 Level II BASIC by Stephen B Gray
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Elem. Elec.	Mr	p47	a	e/e checks the...Radio Shack TRS-80 Computer
Interf. Age	Ap	p141	b	User's Manual for Level I Radio Shack TRS-80 Microcomputer System by David Lien
Kilobaud	Ja	p44	a	The TRS-80: how does it stack up? by Ed Juge
Kilobaud	Ap	p114	a	Turn It Off! power down mod for the TRS-80 by Dave Lien & Dave Waterman
Kilobaud	My	p8	a	TRS-80 Forum by Dave Lien
Kilobaud	Je	p90	a	It's Here: Machine Language for the TRS-80 by Jack W Crenshaw
Kilobaud	Ag	p98	a	Something Extra With Radio Shack's BASIC: A Self Teaching Manual by Sherman P Wantz
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Peoples	Mr	p10	a	TRS-80 A Consumer's Computer? by Tom Williams
Peoples	Mr	p13	a	Radio Shack Responds to the Above Review by Hy Siegel

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Peoples	My	p54	a	TRS-80 Talk by Clyde R Farrell
Peoples	Jy	p30	a	TRS-80 Converting to Level II BASIC by Clyde Farrell
Peoples	S	p6	a	TRS-80 Level II Computer: A Grown-Up Field Evaluation by Thomas Dwyer & margot Critchfield
Per. Comput.	Ag	p53	a	The TRS-80 Comes to Town by Harry Shershaw
Pop. Elec.	N	p94	a	A Cassette Control System for Computers (TRS-80) by A A Mangieri

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Byte	Ja	p86	a	A User's Reaction to the SOL-10 Computer by Robert Bumpous
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Dr. Dobbs	Ja	p38	a	An 8080 Disassembler and Support Software for SOL by Don Van Dyke
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PCW	Jy	p38	a	Owner's Report: The SOL-20 Computer by Ken Wheeler
Peoples	My	p51	a	BASIC 5 Strings (Strings for SOL 20) by Fr. Thomas McGahee
Per. Comput.	Ap	p28	a	Filet of SOL by Gary Dozier
73	Ja	p94	a	You'll Like SOL!

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Byte	O	p144	a	Souping Up Your SwTPC 6800 by Steve A Hughes
Dr. Dobbs	F	p46	l	SWTPC CT-1024 Automatic Scroll by R T Boute
Interf. Age	S	p106	a	Upgrade Your SWTPC System to 60K! by Earle Hilton
Kilobaud	F	p58	a	Tuned for Speed hot-rod mods for your SWTP system by Don Gille
Kilobaud	Ap	p40	a	How to Make Your SWTP System Happy, give it a couple of floppies! by Mickey Ferguson
Kilobaud	Ap	p98	a	Avoid Program Loading and Reloading, new 4K EPROM board from SWTP by Harley D Johnson
Kilobaud	Jy	p90	a	Improvements Make the Difference: SWTP's New System 6800/2 by Peter Stark
Kilobaud	Ag	p110	a	Can't Find It? SWTP BASIC Manual Index by Charles E Thomas
Kilobaud	N	p90	a	Expansion Time! S-100 Memory for SWTP System by Stuart Mitchell & Phil Poole
Kilobaud	D	p60	a	SWTP 4K RAM Write Protect Option by Gary D Gaugler
Kilobaud	D	p92	a	There Is a Better MIKBUG! SWTBUG by Phil Hughes
73	Mr	p96	a	Another Approach to the ASCII/Baudot Headache - Model 15 to SWTP system by Garry O Caudell
73	My	p112	a	Semi-Instant Program Loading - bauding up the SWT 6800 by Jack G Starr
73	Jy	p112	a	Six Said His First Word Today! - and you taught him how by Charles E Thomas
73	N	p168	a	SSTV Meets SWTPC: Part 1 --micro-enhanced pictures by Clayton W Abrams
73	D	p152	a	SSTV Meets SWTPC: part 2 --micro-enhanced pictures by Clayton W Abrams

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Elec. Des.	F 1	p56	a	Reduce your uC-based system with SBC cards by George Adams
Elec. Des.	Je21	p46	a	Low-Cost 1-board computer includes printer, display & keyboard AIM65
Elec. Des.	Jy5	p76	a	Pu the capabilities of the Z80 to work with the Z80-MCB card family by Roy Blacksher & Bob Reynolds
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Kilobaud	Ja	p86	a	Your IMSAI and You four steps to a happier relationship by J Ward Spaniol
Kilobaud	Mr	p16	a	Build the "Simple Computer" a home-brew 8080 by Dick Whipple
Kilobaud	Je	p92	a	Two Systems Sharing the Same Bus by Mark Boyd
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Micro	Je	p28	a	Synertek's VIM-1
Mini Micro	Je	p68	a	The LISP Machine by Sandor R Schoichet
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73	Mr	p104	a	Outstanding Computer Bargain Exposed - a novice builds the BYT-8 by Keith R Smith

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Interf. Age	F	p88	a	Electron Beam Generator Produces ICs Nine Times Smaller by Dr Andrew Wittkower
Kilobaud	F	p16	a	uComputers/uProcessors: Hardware, Software & Applications by Hilburn & Julich
Spectrum	Ja	p36	a	Technology '78, Solid State Devices: Memories and Microprocessors by Edward A Torrero
Spectrum	My	p28	a	How VLSI Impacts Computer Architecture (Z8000) by Fredrico Faggin

## MICROPROCESSORS: SELECTION GUIDES

Dig. Design	D	p94	a	Microprocessors by Janhe Mair & Al Moore
EDN	Ja20	p75	a	Use forthcoming one-chip uC's to achieve lower costs gracefully (Sel.G) by Robert Cushman
EDN	N 20	p67	a	EDN's Fifth Annual Microprocessor Directory by Robert Cushman
EDN	N 20	p191	a	Sophistication on Silicon-LSI provides system solutions, Support Chip Dir by Robert Cushman
Electronics	Ag3	p91	a	How bit-slice families compare: Part 1. Evaluating processor elements by W Thomas Adams & Scott Smith
Elec. Des.	Ja18	p24	a	Time was when a mini was a mini, micro was a micro and picking was easy by Max J Schindler
Elec. Des.	Ja18	p60	a	Let 4-bit microcomputers do the simple jobs (Panasonic uP) by Bill Bottari & Terry Kobayashi
Elec. Des.	My24	p65	a	Microcomputer Data Manual (selection guide)
Elec. Des.	Je21	p86	a	Microcomputers: Single-chip or single-board? by Terry Benson
Elec. Des.	O 11	p54	a	Microprocessor Selection Guide
Interf. Age	My	p42	a	...From The Fountainhead; uProcessor Update by Adam Osborne
Kilobaud	Je	p52	a	8080. Z-80 or 8085? by Michael Slater
Mini Micro	D	p58	a	The Microprocessor Popularity Race by Carol A Oggdin
Pop. Elec.	N	p101	a	16-Bit VS 8-Bit Microprocessors by Gordon Letwin & Hampton Miller

## MICROPROCESSOR: 6502

Byte	F	p93	c	Correction for SWEET 16: The 6502 Dream Machine (Byte Nov '77 p151) by John Feagans
Byte	My	p153	l	Instruction Search. Finding Undefined Instructions (6502) by Francis O'Reilly
Byte	Je	p136	a	Beware Compromising the Stack Pointer by Tom Pittman

**MICROPROCESSOR: 6502 continued**

Dr. Dobbs	Ja	p4	a	Memory Test for 6502 by Carl Moser
Dr. Dobbs	Ja	p6	l	Challenging Challenger's ROMs, 6502 Disassembler by Stephen P Smith
Dr. Dobbs	Mr	p3	c	6502 Disassembler Fix (DDJ Jan '78) by Stephen P Smith
Dr. Dobbs	Ag	p39	c	Yet Another 6502 Disassembler Fix (DDJ Jan '78 p6) by Bennett Meyer
Dr. Dobbs	Ag	p31	a	Fast Cassette Interface for the 6502 by Carl Moser
Electronics	Je8	p126	a	Expanded package speeds design with new. one chip uC (6500/1) by D Starbuck, D Peeters, K Hogan & R Eufinger
Kilobaud	Ag	p8	b	Programming a Microcomputer: 6502 by Caxton C Foster
Kilobaud	O	p110	a	Build a One-Chip Single Stepper by Philip Ngai
Micro	F	p33	a	6502 Bibliography Part II by William Dial
Micro	Ap	p31	a	Standard 6502 Assembly Syntax? by Hal Chamberlin
Micro	Ap	p35	a	6502 Bibliography Part III by William Dial
Micro	Je	p14	a	Rockwell's New R6500/1
Micro	Je	p15	a	6502 Interfacing for Beginners: Address Decoding I by Marvin L DeJong
Micro	Je	p37	a	6502 Bibliography Part IV by William Dial
Micro	Ag	p29	a	6502 Interfacing for Beginners: Address Decoding by Marvin L DeJong
Micro	Ag	p37	a	6502 Bibliography Part V by William Dial
Micro	Ag	p39	b	Programming a Micro-Computer 6502 by Caxton C Foster
Micro	O	p17	a	6502 Interfacing for Beginners: The Control Signals by Marvin L DeJong
Micro	O	p33	a	6502 Bibliography Part VI by William Dial
Micro	D	p5	a	6502 Interfacing for Beginners: Buffering the Busses by Marvin L DeJong
Micro	D	p45	a	6502 Bibliography Part VII by William R Dial
Radio Elec.	My	p82	a	Computer Corner: 6502 In-Depth Look at this Microprocessor by Willaim Barden

**MICROPROCESSOR: 6800..68000 (MOTOROLA)**

Byte	Ja	p84	a	The Motorola 6800 Instruction Set. Two Programming Points of View by Paul M Jessop
Byte	Ja	p168	m	The Motorola 6809: Some Rumors from Austin by Carl Helmers
Byte	F	p93	c	Correction for Building a M6800 Microcomputer (Byte June '76 p45) by Bob Abbott
Byte	Je	p119	b	Motorola 6800 Microprocessor Course by Motorola Semiconductor
Byte	Je	p132	a	Speeding Up MIKBUG IO Routines by T W Moore
Byte	Je	p136	a	Beware Compromising the Stack Pointer by Tom Pittman
Dig. Design	O	p60	a	This 6800 system handles clock stealing by Bob Ferguson
Dr. Dobbs	My	p28	a	Resident Memory Test Systems: With an Example for the 6800 by Terry Ritter
Dr. Dobbs	Ag	p39	l	M6809 Memory Test by Kenneth Drexler
Dr. Dobbs	S	p4	a	EM8080: An 8080 Emulator for 6800 Systems by Gary Gaugler
Dr. Dobbs	S	p32	l	Monitors for the 6800 by Chuck Adams
EDN	Je20	p48	a	M6800 SP functions as IR in interrupt-driven systems by Geoffrey Gass
EDN	Ag20	p67	a	Improved M6800 routines stack X register by Kalit Kumar
Electronics	F 2	p95	a	Compatibility cures growing pains of microcomputer family (Motorola uPs) by Michael Wiles, Fuad Musa, T Frank Ritter, Joel Boney & Tom Gunter
Electronics	O 12	p142	a	Processor's PROM decoder extends addressing capabilities by Robert S Rodgers
Elec. Des.	Jy19	p28	a	MC68000 16bit uP to offer wide address range, powerful commands by Dave Bursky
Elec. Des.	S 1	p100	a	Complex systems are simple to design with a MC68000 uP by Ian LeMair & Robert Nobis
Kilobaud	Ja	p94	a	Micro Maestro a musical review of Motorolas's MEK6800D2 by Terry Perdue
Kilobaud	Mr	p32	a	Customized MIKBUG, some interesting mods by Don Kinzer
Kilobaud	Ap	p52	a	Utility Routines, useful programs for your 6800 by James P Fentress
Kilobaud	S	p92	a	Motorola's Latest: The MC6802 by Tim Ahrens
Kilobaud	O	p10	b	6800 Programming for Logic Design by Adam Osborne
Kilobaud	N	p26	a	Raster Scan Graphic for the 6800 Part 1: The hardware by David Koh
Kilobaud	D	p56	a	Raster Scan Graphics for the 6800 Part 2: The Software by David koh
Kilobaud	D	p92	a	There Is a Better MIKBUG! SWTBUG by Phil Hughes
PCW	Ag	p41	b	Scelbi "6800" Software Gourmet Guide and Cookbook
Radio Elec.	O	p78	a	Computer Corner: 6800. An Overall Look at the Hardware and Software by William Barden

**MICROPROCESSOR: 8080..8086 (INTEL)**

Byte	Ja	p136	b	Practical Microcomputer Programming: the Intel 8080 by W J Weller, A V Shatzel & H Y Nice
Byte	Mr	p185	a	Get On at the Right Address (Bootstrap for the 8080) by Frank S Holman
Byte	Je	p99	l	A Bit Simpler. 8080 Bootstrap in Byte Mar '78 p185 by Steve Bresson
Byte	S	p145	b	The 8080 Programmer's Pocket Guide by Scelbi
Byte	S	p145	b	Tychon 8080 Hex Code Card by Tychon
Calc. Comp.	F	p5	a	8080 Machine Language Programming for Beginners by Ron Santore
Calc. Comp.	Mr	p44	a	8080 Machine Language Programming for Beginners by Ron Santore

### MICROPROCESSOR: 8080..8086 (INTEL) continued

Calc. Comp.	S	p82	a	8080 Machine Language Programming for Beginners (Button-Button Game) by Ron Santore
Comp. Des.	Jy	p115	a	Interfacing Fundamentals: The 8085 uProcessor by D Larsen, P Rony, C Titus & J Titus
Comp. Des.	Ag	p122	a	Interfacing Fundamentals: The 8085 Family of Memory Devices by C Titus, J Titus, D Larsen & P Rony
Comp. Des.	S	p140	a	Interfacing Fundamentals: An Application of the 8085 by P Rony, D Larsen, C Titus & J Titus
Comp. Des.	O	p164	a	Interfacing Fundamentals: The Application of the 8085 Processor Part 2 by J Titus, C Titus, P Rony & D Larsen
Cr. Comput.	S	p118	a	SMAL/80
Dr. Dobbs	Mr	p20	a	ACT An 8080 Macroprocessor by Alex Cecil
Dr. Dobbs	Ap	p27	a	ACT An 8080 Macroprocessor by Alex Cecil
Dr. Dobbs	Ag	p4	a	A Compact 8080 Disassembler & Dumper by Richard Greenlaw
Dr. Dobbs	Ag	p19	a	The Intel 8086 by Mike Gabrielson
Dr. Dobbs	S	p4	a	EM8080: An 8080 Emulator for 6800 Systems by Gary Gaugler
Dr. Dobbs	O	p3	l	Pushing 8080 Registers by Mike Gabrielson
EDN	F 5	p25	a	8080 interrupt instructions double as breakpoints by E G Dillon
Electronics	F 16	p99	a	8086 microcomputer bridges the gap between 8- and 16-bit designs by B Jeffery Katz, Stephen P Morse, William B Pohlman & Bruce Revenel
Electronics	O 12	p105	a	16-bit single-board computer maintains 8-bit family ties (8086) by Robert Garrow, Jim Johnson & Les Soltesz
Interf. Age	F	p76	a	BASIC Cross Assembler for the 8080 by Peter Reece
Interf. Age	Mr	p158	a	HEXMON: An 8080 Intel HEX-Format Paper-Tape Monitor by Alan R Miller
Interf. Age	Ap	p110	a	The 8085 in Robot Design by Frank Da Costa
Interf. Age	Je	p115	b	8080 Programming for Logic Design by Adam Osborne
Kilobaud	F	p16	b	Scelbi 8080 Software Gourmet Guide and Cookbook by Robert Findley
Kilobaud	Mr	p16	a	Build the "Simple Computer" a home-brew 8080 by Dick Whipple
Kilobaud	My	p16	b	Practical Microcomputer Programming: The Intel 8080 by Weller, Shatzel & Nice
Kilobaud	Je	p11	b	8080A/8085 Assembly Language Programming by Lance A Leventhal
Kilobaud	Je	p11	b	The 8080A Bugbook by Rony, Larsen, Titus
Mini Micro	Ap	p70	a	The Intel Micro Family; 8080, 8085, 8048 by Carol A Ogdin
Mini Micro	Ag	p86	a	The 16-Bit 8086 by John Bond
PCW	S	p39	a	Advanced Intelligence 8086 by Bill Davy
PCW	D	p44	b	A Step by Step Introduction to 8080 Microprocessor Systems by David L Cohn & L Melsa
73	O	p146	a	Interrupts Made Easy - for 8080/S-100 users by Jim Marr

### MICROPROCESSOR: BIT-SLICE

Comp. Des.	Ag	p83	a	Hardware Approaches to uProgramming with Bipolar uProcessors by Joseph C Conway
Electronics	Ag3	p91	a	How bit-slice families compare: Part 1. Evaluating processor elements by W Thomas Adams & Scott Smith
Electronics	Ag17	p96	a	How bit-slice families compare: part 2. sizing up the microcontrollers by W Thomas Adams & Scott M Smith
Electronics	Ag31	p138	a	Postscript on bit-slice families: microcontrollers serve many needs by W Thomas Adams & Scott M Smith
Electronics	N 9	p107	a	Bit-slice parts approach ECL speeds with TTL power levels by Dale Mrazek
Elec. Des.	Ap12	p74	a	Emulate your MOS microprocessor with bipolar bit slices by Stephen Y Lau

### MICROPROCESSOR: COSMAC 1802

Byte	D	p108	a	An Easy Programming System by Joseph Weisbecker
Interf. Age	My	p104	a	RCA CDP 1802 COSMAC Microprocessor by Joseph Pallas
Kilobaud	Ag	p102	a	The Amazing 1802: D/A and A/D Applications by Robert J Cotter
Radio Elec.	D	p45	a	NOM Card For The 1802 (Add-On Math Board) by L Steven Cheairs

### MICROPROCESSOR: F-8

Comp. Des.	Ja	p109	a	Handling Multilevel Subroutines & Interrupts in Microcomputers (F8) by James F Vittera
EDN	F 20	p35	a	A stack for the F8 by Jack E Hemenway
Electronics	My11	p105	a	RAM/ROM Single-chip microcomputer expands its memory (3872) by Harold W Dozier & Robert S Green

### MICROPROCESSOR: SC/MP

Dr. Dobbs	F	p13	a	Faster Data Entry for SC/MP by Erik Skovgaard
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**MICROPROCESSOR: SC/MP continued**

Dr. Dobbs Electronics	N S 28	p144 p148	1 a	Compressed Subroutine Calls for SC/MP by Phil Hughes Small interface simplifies processor interrupt routine (SC/MP) by Robert Shanafelt
PCW	Je	p17	a	Yes, But What Does the Little Beast Do? by W G Marshall

**MICROPROCESSOR: Z-80..Z8000 (ZILOG)**

Byte	Je	p118	b	Z-80 Programming Manual by MOSTEK
Byte	Jy	p60	a	The Z-80 in Parallel by Bob Loewer
Byte	D	p92	a	Z-80 Assembler by Patrick A Crowe
Cr. Comput.	N	p48	b	The Z-80 Microcomputer Handbook by William Barden
Dr. Dobbs	Mr	p11	a	A Z-80 Tracer by Arthur W Cline
Dr. Dobbs	Ap	p12	a	A 1K Debugger for the Z-80 by Les Hancock
Dr. Dobbs	Je	p28	a	The Zilog Z-8 by Unreliable Source
Dr. Dobbs	Je	p42	a	A Z-80 Disassembler in TDL 8K BASIC
Dr. Dobbs	Ag	p22	a	A 1K Utilities Package for the Z-80 by Les Hancock
Electronics	Ag31	p128	a	Introducing the Z-8; One chip uComputer excels in I/O & memory uses by Bernard L Peuto & Gary J Prosenko
Electronics	D 21	p81	a	Two Versions of 16-bit chip span uComputer, minicomputer needs (Z8000) by Masatoshi Sima
Interf. Age	Jy	p153	b	The Z-80 Microcomputer Handbook by William Barden
Kilobaud	Je	p26	a	Home-Brew Z-80 System (Part 1) by Norman E Thagard
Kilobaud	Jy	p80	a	Home-Brew Z-80 System (Part 2) by Norman E Thagard
Kilobaud	Ag	p8	b	The Z-80 Microcomputer Handbook by William Barden
Kilobaud	S	p8	b	Z-80 Programming for Logic Design by Adam Osborne
Mini Micro	Je	p44	a	A ZILOG Preview (Z8000) by John Trifari
PCW	Jy	p48	a	A Guided Tour of the Z-80 by Neil Harrison
Radio Elec.	Ja	p68	a	Computer Corner: Z-80 Instruction Set & How it Compares to the 8080 by William Barden
Radio Elec.	F	p72	a	Computer Corner: Z-80 Addressing Modes by William Barden
Radio Elec.	Mr	p68	a	Computer Corner: Z-80 Interrupts by William Barden
Radio Elec.	Ap	p80	a	Computer Corner: Z-80 Interfacing by William Barden
Spectrum	My	p28	a	How VLSI Impacts Computer Architecture (Z8000) by Fredrico Faggin

**MICROPROCESSORS: OTHER**

Byte	Ag	p64	a	The Number Crunching Processor (National MC67109) by Peter Nelson
Electronics	My25	p122	a	uController includes a-d converter for low-cost analog interfacing 8022 by W Check, E Cheng, G Hill, M Hollen & J Miller
Electronics	Jy20	p129	a	Microcomputer's on-chip functions ease users' programming chores (8022) by William F Ittner & Jeffery A Miller
Elec. Des.	Mr15	p62	a	Take advantage of powerful instructions in the PIC-1650 (GI) by Peter Rush
Elec. Des.	Je7	p54	a	Minis, look out: Here comes a powerful family of 16-bit uC chips by Stephen Scrupski
Elec. Des.	S 1	p46	a	16-bit uPs to offer performance, address range, data paths of minis by Dave Bursky
Interf. Age	Mr	p56	a	Development System for the 16-Bit PACE Microprocessor by Phil Roybal
Interf. Age	My	p42	a	...From The Fountainhead; uProcessor Update by Adam Osborne
Interf. Age	Je	p158	a	TMS9900 Interactive Monitor Part I by Burt Johnson
Interf. Age	Jy	p163	a	TMS9900 Interactive Monitor Part II by Burt Johnson

**MODEM**

Byte	Jy	p6	e	Some Thoughts About Modems by Carl Helmers
Comp. Des.	Ja	p14	a	Local Modems by John E Buckley
Comp. Des.	F	p101	a	Integrating Medium Speed Modems Into Communications Network by Ken Krechmer
Dr. Dobbs	Je	p4	a	Intelligent Terminal Implementation for the S-100 Bus using IDS 88 Modem by Tim Pugh
Dr. Dobbs	O	p42	c	DC Hayes Response to Modem Comparison (DDJ Jun '78) by Donald J Hyde
EDN	N 5	p69	a	Modems (selection guide) by Edward R Teja
Elec. Des.	Ap26	p72	a	Specify low-speed modems properly for distributed computer systems by Tony Mazzarini
Elem. Elec.	Jy	p41	a	e/e assembles the... Pennywhistle 103 Originat Modem
Kilobaud	N	p52	a	Hey, Kids! It's "Mickey Modem"! (Not a Toy) by Stephen Gibson
73	D	p164	a	"This is Your Computer Speaking" —how to dial up your micro (modem) by Jerry Sorrels

**MUSIC**

Byte	Mr	p9	a	A Two Computer Music System by Jeffery H Lederer, Tom Dwyer & Margot Critchfield
Byte	Mr	p56	a	The Microcomputer and the Pipe Organ by Jef Raskin
Byte	Je	p140	a	More Music for the 6502 by T C O'Haver
Byte	N	p146	c	Correction for: A \$19 Music Interface (Byte Dec '77 p 48) by Scott Claybaugh
Cr. Comput.	Mr	p28	a	Computer Music: Four Systems, Plus a Music Program by Steve North
Cr. Comput.	Mr	p54	b	Electronic Music Circuit Guidebook by Brice Ward
Cr. Comput.	My	p60	a	The Music Cassette by David H Ahl
EDN	My20	p19	a	Minicomputer plays organ pieces humans find highly difficult by Paul G Schreier
EDN	Ag5	p34	a	Modern-day player piano stores music on cassette, not perforated rolls by Sam Davis
EDN	S 20	p57	a	Quartet of SC/MP's plays music for trio by Tenny Doone
Electronics	Je22	p122	a	Resistor matrix orchestrates electronic piano/tone generator by Hsi Jue Tsi
Electronics	S 28	p126	a	Envelope generator sets music-box timbre by Ken Dugan
Kilobaud	Ja	p94	a	Micro Maestro a musical review of Motorolas's MEK6800D2 by Terry Perdue
Kilobaud	F	p46	a	The Music Man Prentiss Knowlton's computerized pipe organ by Sheila Clarke
Kilobaud	S	p82	a	KIM Organ, Short...but sweet notes will emanate from you KIM by Don Ketchum
Kilobaud	N	p82	a	Music, Music and More Music by Rod Hallen
Micro	Ja	p3	a	Making Music with the KIM-1 by Armand L Camus
Micro	Ja	p19	a	Ludwig von Apple II (Music) by Marc Schwartz
Micro	F	p8	a	Machine Language Used In "Ludwig von Apple II" by C R Carpenter
Micro	Je	p29	a	Applayer Music Interpreter by Richard F Sutor
Micro	Ag	p13	a	Apple II Starwars Theme by Andrew H Eliason
Modern Elec	O	p80	a	Program: Music for the ELF by Thomas Rohr
PCW	Jy	p34	a	Johann Sebastian Byte by Michael Inggs
Per. Comput.	Mr	p71	a	Noting Music by Computer by Dr P Mars
Per. Comput.	My	p68	a	MUSIC from A to G by Linda M Schreiber
Pop. Elec.	F	p92	a	Computer Bits: Music Generators and Other Items by Leslie Solomon
Pop. Elec.	Ap	p56	a	How Electronic Music Synthesizers Work by John S Simonton
Pop. Elec.	Ap	p60	a	Build a Computer Music Box Peripheral by Martin Smaha
73	My	p106	a	Beethoven Need Not Fear - a little night music on the micro by Mike K Cook
73	N	p150	a	The Micro Maestro! by Sam Creason

**PLOTTERS & PLOTTING**

Byte	F	p172	a	Some Plotting Comments by T P Roberts
Byte	My	p10	a	The Photograph is Also a Hard Copy by Dr. Dwight D Egbert
Byte	My	p49	a	Hidden Line Subroutines for Three Dimensional Plotting by Mark Gottlieb
Byte	My	p60	a	PLOT3D: A Function Plotting Program by Mike Stoddard
Dig. Design	S	p80	a	What's happening to Printer/Plotters? by S L Rutherford
Dig. Design	N	p28	a	Spotlight on Printer/Plotters by Paul Sniger
Dig. Design	D	p74	a	Printer/Plotters by Robert Hines
EDN	N 5	p61	a	M6800 log routine controls plotter by Fred Gutman
Elec. Des.	Mr29	p86	a	Plotting routine produces compact, high resolution graph BASIC by Colin J Shakespeare
PCW	N	p49	a	Plan for a Plotter by R I Elliot
Peoples	Jy	p44	a	PLOT (PET) by Philip Gash

**POWER SUPPLY**

Byte	O	p22	a	Build a 5 W DC to DC Converter by Steve Ciarcia
Comp. Des.	Mr	p103	a	Universal Switching Regulator Diversifies Power System Applications by Russell Apfel & David B Jones
EDN	O 20	p82	a	Safe supply manages MOS memories by Robert Pease
Electronics	Ja19	p111	a	Dc-dc power supply regulates down to 0 volt by P R K Chetty & A Barnaba
Elec. Des.	Ap26	p104	a	Tailor-make your own uP power supply by Edward Polen
Elec. Des.	Je7	p88	a	FOCUS on Batteries by Morris Grossman
Elec. Des.	Jy19	p80	a	Add a standby battery to a RAM and make a nonvolatile memory by Patrick W Boyle & Robert F Wentin
Elec. Des.	Ag16	p72	a	FOCUS on Switching Power Supplies by Sid Adlerstein
Interf. Age	Ag	p120	a	Personal Computer Protection by F J Stifter
Kilobaud	Ap	p114	a	Turn It Off! power down mod for the TRS-80 by Dave Lien & Dave Waterman
Micro	F	p28	a	The Apple II Power Supply Revisited by Rod Holt
Micro	Ag	p42	a	Power from the PET by Karl E Quosig
Peoples	Jy	p47	a	PETing A Diablo by Bueck & Jenkins
Per. Comput.	Jy	p74	a	Firmware Facts: Voltage on the Level by Austin Lesea & Rodney Zaks
Per. Comput.	Ag	p35	a	Firmware Facts: Watts for Dinner by Austin Lesea & Rodney Zaks
Per. Comput.	D	p32	a	Firmware Facts: Power Supplies In Retrospect by Austin Lesea & Rodney Zaks

## POWER SUPPLY continued

Pop. Elec.	Ap	p41	a	How to Design & Build Power Supplies Part 1 by Joseph Carr
Pop. Elec.	My	p61	a	How to Design & Build Power Supplies Part 2 by Joseph Carr
QST	Jy	p28	a	A Programmable Regulated Power Supply by John Bipes
Radio Elec.	D	p56	a	Hobby Computer Power Supplies by Joseph J Carr
73	Ja	p140	a	Power Supply Regulation
73	Mr	p52	a	Exorcising Power Supply Demons-what to do when Murphy visits by Joseph J Carr
73	Mr	p132	a	Surprisingly Low-Cost Lab Supply - an IC Regulator does it! by Hank Olson
73	Ap	p76	a	Feeding a Hungry Microcomputer - power supplies by Henry Olson
73	Ag	p120	a	Super Charger - keeps nicads up to snuff by Jeremy A Donimirski
73	S	p201	a	Charge! - your nicads by E E Buffington
73	O	p268	a	A Perfect Power Supply? - well . . . almost by D C Mitchell

## PRINTER

Byte	Jy	p28	a	The Axicom EX800 Printer: A User's Report by R J Bosen
Byte	D	p94	a	Interface Your Computer to a Printing Calculator by Robert H Astmann
CQ	My	p16	a	An RTTY Primer by Irwin Schwartz
Comp. Des.	Jy	p104	a	Ink-Jet Printer Mechanism Uses Non-Static Vacuum Technique by Joachim Heinzl & Gunter Rosenstock
Cr. Comput.	Jy	p110	a	What Kind's of Printers Are Ther?
Dig. Design	S	p22	a	The Quiet Revolution in Ink Jet Printing by Edwin V W Zschaw
Dig. Design	S	p32	a	New Daisy Wheel Printers Improve Printing Quality by Ron Ogg
Dig. Design	S	p36	a	Thermal Printers Offer speed & silence to CRT Users by David Ratcliff
Dig. Design	S	p44	a	Selecting a Printer? Follow these Guidlines by Gordon Osborn, Vince Hewitt, John DeSantis & Bob Adams
Dig. Design	S	p50	a	Spotlight on Printers, Selection Guide by Paul Sniger
Dig. Design	S	p80	a	What's happening to Printer/Plotters? by S L Rutherford
Dig. Design	N	p28	a	Spotlight on Printer/Plotters by Paul Sniger
Dig. Design	D	p58	a	Character Printers
Dig. Design	D	p62	a	Printers by John Henry
Dig. Design	D	p73	a	Spinwriting Printing by Bruce Thatcher
Dig. Design	D	p74	a	Printer/Plotters by Robert Hines
Dr. Dobbs	Ag	p27	a	A Shorter Printer Driver for PolyMorphic's BASIC by Richard B Emerson
EDN	My5	p37	a	M6800 subroutine drives a line printer by Jack E Heneway
Elec. Des.	Ag2	p56	a	FOCUS on Printers by Stanley Runyon
Interf. Age	Ja	p148	b	Interfacing Selectrics to Microcomputers by Carl Townsend
Interf. Age	O	p98	a	Hard Copy: Why Not the Best? Go Daisywheel by John MacDougall
Kilobaud	Mr	p48	a	Super Terminal! Interfacing the Burroughs 9350-2 by R R Derynck
Kilobaud	Je	p112	c	Correction for: Super Terminal (Kilobaud March '78 p48) by Robert Smith
Kilobaud	Mr	p100	a	The AXIOM EX-800 a versatile printer by Carl Denver Warren
Kilobaud	My	p64	a	What's Happening with the IBM Selectric? Micro Computer Devices answer by Sheila Clarke
Kilobaud	Je	p22	a	Taming the I/O Selectric (Part 1) by Emerson Brooks
Kilobaud	Je	p46	a	Baudot...er...Murray. Meet the H8 by Howard L Nurse
Kilobaud	Jy	p40	a	Taming the I/O Selectric (Part 2) by Emerson Brooks
Kilobaud	Je	p60	a	Is the Malibu Model 160 the Printer for Your Business System by Dan Dederick
Kilobaud	S	p66	a	Baudot Interface Cookbook, A \$50 Printer? by J R Haglund & W B Reed
Kilobaud	D	p22	a	A Sensible Alternative, Dura Selectric by Kenneth Aird
Micro	F	p13	a	Printing with the Apple II, Telpar PS-40-3C by C R Carpenter
Micro	Ap	p27	c	Apple II Printing Update (Micro Feb '78) by C R Carpenter
Mini Micro	Ja	p52	a	PRINTERS; A User's Guide to the Market by Irving L Wieselman
Mini Micro	Mr	p71	a	Starring: The Micro and the Matrix. Printer Selection Guide by Malcolm L Stiefel
Modern Elec	O	p79	a	Adding a Printer to Your Heath H8 Computer by Carmine Prestia
PCW	My	p47	a	Missionary Job: The Conversion of IBM 73 Series I/O Writers by John M Anderson
PCW	D	p59	a	The Poor Man's Printer by Phil Cornes
Per. Comput.	Je	p60	a	Picking a Printer by Chip A Tyeti
73	Ja	p82	a	Weather Satellite Pix Printer

## PROGRAMMING: GENERAL

Byte	F	p30	a	The Case for a "Compiler Interpreter" by Richard Rodman
Byte	F	p167	a	Measuring Program Size by Stefan T Dobrowolski
Byte	Jy	p152	a	A High Level Language for 8 Bit Machines by Ted Williams & Steve Conley
Byte	S	p166	a	WADUZITDO: How to Write a Language in 256 Words or Less by Larry Kheriaty
Byte	O	p54	b	Microprocessor Programming for Computer Hobbyists by Neil Graham
Byte	N	p132	b	Etudes for Programmers by Charles Wetherell
Byte	N	p133	b	Program Style, Design, Efficiency, Debugging and Testing by D Van Tassel
Calc. Comp.	N	p44	a	Non-Math Computer Programs by Jane Donnelly Gawronski & Charlene West

## PROGRAMMING: GENERAL continued

Cr. Comput.	Ja	p123	a	"Hands-On" & Fast Turnaround-A Must for a Successful Program by Thomas J Cashman & Gary B Shelly
Cr. Comput.	Mr	p56	a	Three Little Programmers (A Grim Fairy Tale) by Alan B Salisbury
Cr. Comput.	Jy	p98	a	Programming Like a Natural by Theodor Nelson
Cr. Comput.	S	p144	a	The Systems Approach: How to Evaluate, Design & Implement Software Appl. by John R Lees
Cr. Comput.	N	p44	a	Operating Systems Q & A by John Craig
Cr. Comput.	N	p106	a	An Experiment in Teaching Strategic Thinking by J M Brady & R B Emanuel
Dig. Design	Ag	p22	a	Self Propagating computer programs, Key to low cost software? by Michael Zeidlar
Dig. Design	O	p20	a	Software Development: Problem. Definition, the first step by Lance Leventhal & William Walsh
Dr. Dobbs	S	p29	a	Use of Nopcodes as Executable Labels by H T Gordon
EDN	Ja20	p105	a	Microprogramming ups your options in uP-system design by Jim Brick & John Mick
EDN	F 5	p53	a	Microprogramming ups your options in uP-system design by Jim Brick & John Mick
EDN	F 20	p75	a	Microprogramming ups your options in uP-system design, software by Jim Brick & John Mick
EDN	My5	p34	a	Program size vs speed—not always a tradeoff by Jon Colt
EDN	My20	p155	a	Homegrown debug software can hone your design skills by Robert Cushman
Electronics	Ap13	p119	a	Say it in a high-level language with 64-K read only memories by Rudy Langer & Thomas Dugan
Electronics	Je22	p126	a	Factoring in software costs avoids red ink in microprocessor projects by Phillip Hughes
Elec. Des.	Jy5	p64	a	Fit your uC with the right software package by Max J Schindler
Elec. Des.	Jy19	p62	a	Develop uP software efficiently by using language and design tools by Michael Rooney
Interf. Age	F	p48	a	Sense Line; So You Want To Be A Computer Star! by Gary Young
Interf. Age	My	p110	a	A Developement-Project; Reporting & Control Technique by William Rosenbluth
Interf. Age	N	p50	a	1978 Index to Software
Interf. Age	N	p82	a	Business Editorial: Software Obsevations by Jim Schreier
Kilobaud	F	p64	a	You'll Be Tickled by Fickled a charting and diagramming aid by Carl D Warren
Kilobaud	F	p121	b	A Collection of Programming Problems & Techniques by H A Maurer & M R Williams
Kilobaud	Ap	p13	b	Programming Proverbs and Programming Proverbs for FORTRAN Programmers by Henry F Ledgard
Kilobaud	Ap	p22	a	Kilobaud's Mystery Program are you ready for this? by Tom Rugg & Phil Feldman
Kilobaud	My	p16	b	Practical Microcomputer Programming: The Intel 8080 by Weller, Shatzel & Nice
Micro	Ap	p23	a	The Micro Software Catalog (Index of 6502 Software) by Mike Rowe
Micro	Je	p23	a	The Micro Software Catalog: II List of programs by Mike Rowe
Micro	Ag	p23	a	The MICRO Software Catalog: III by Mike Rowe
Micro	O	p29	a	The MICRO Software Catalog IV by Mike Rowe
Mini Micro	My	p65	a	Subroutine Libraries. How to set one up by Thomas Fay
Mini Micro	Je	p107	a	What's What In Personal Computing Software by Adam Osborne
Modern Elec	O	p8	a	Computers: Who are programmers, what do they do? by Pete Stark
Peoples	Mr	p15	b	The Schreir Software Index to Published Microcomputer Software by Jim Schrier
Peoples	My	p27	a	SKETCHCODE, A Documentation Technique for Computer Programmers by Todd L Voros
Per. Comput.	F	p92	a	Programming Hangups
Per. Comput.	Ap	p22	a	Debugging your Software: Program Testing by Robert T Nicholson
Per. Comput.	Je	p26	a	Programming the Most Complex Computer
Pop. Elec.	S	p4	e	The Software Rights Dilemma by Art Salsberg
ROM	Mr	p71	a	Why Interpret? by Eben Ostby
Radio Elec.	Je	p56	a	Computer Corner: How to Prepare Programs for Microcomputers by Peter Rony, Chris Larsen & Jonathan Titus

## PROGRAMMING &amp; SOFTWARE: APPLICATION PROGRAMS

Byte	My	p168	a	Line Combinations (8080) by Randy G Soderstrom
Byte	Je	p14	a	A Programmable Character Generator Part 2: Software by Larry Weinstein
Byte	Je	p109	a	Those Calculating Romans by Laurence G Dishman
Byte	O	p68	a	Formatting Dollars and Cents (BASIC) by Les Palenik
Byte	O	p100	a	Linear Circuit Analysis by Leonard H Anderson
Byte	O	p136	a	Maze by Robert J Bishop
Byte	N	p66	a	Checkbook Balancer (BASIC) by Rod Hallen
Byte	D	p14	a	Fast Fourier Transforms on Your Home Computer by William D Stanley & Steven J Peterson
Byte	D	p168	a	Partitioned Data Sets by A I Halsma
Comp. Des.	Je	p113	a	Software Analyses for Combinatorial Logic by John L Pokoski
Cr. Comput.	Ja	p140	a	Kirkof and Netwrk by Alan Brown
Cr. Comput.	Mr	p111	a	Inventory Control: AIM (Automatic Inv. Managemnt Sys. from Comp Mart NJ) by Tom Cirillo

## PROGRAMMING &amp; SOFTWARE: APPLICATION PROGRAMS continued

Cr. Comput.	Mr	p116	a	Inventory Control: Scientific Research Inst.
Cr. Comput.	Mr	p122	a	Inventory Control: Altair Software Distribution Co.
Cr. Comput.	My	p74	a	Tracking Right-Angle Searches In Mazes and Games by Scott Davidson
Cr. Comput.	S	p106	a	Short Programms....Subscripts, Common Birthdays
Cr. Comput.	N	p86	a	Critical Path Analysis by Ruth M Sabean, Margot Critchfield & Thomas Dwyer
Cr. Comput.	N	p134	a	Solving Those Mail List Problems-Mail List, Billing Program for Business by Donald M Williams
Cr. Comput.	N	p138	a	Mailing List System by Gary O Young
Dr. Dobbs	My	p4	a	Programming Language Translation Techniques by William M McKeeman
Dr. Dobbs	Je	p4	a	Intelligent Terminal Implementation for the S-100 Bus using IDS 88 Modem by Tim Pugh
Dr. Dobbs	O	p42	c	DC Hayes Response to Modem Comparison (DDJ Jun '78) by Donald J Hyde
Dr. Dobbs	S	p4	a	EM8080: An 8080 Emulator for 6800 Systems by Gary Gaugler
Dr. Dobbs	O	p34	a	Whatis: An Expression Evaluator for the 8080 by Mike Gabrielson
Dr. Dobbs	N	p12	a	A Curve Fitting Program Using a Focal Interpreter on the KIM-1 by Theodore E Bridge
Dr. Dobbs	N	p15	a	Binary Tree Manipulation on the 8080 by Mike Gabrielson
EDN	Je5	p35	a	BASIC program provides statistics tools by V Ramamoorthy
EDN	Je5	p36	a	Z80 subroutine performs 4-digit decimal addition by Avram Grossman
EDN	O 5	p80	a	BASIC subroutine runs a slow FFT by William Wagner
EDN	N 5	p61	a	M6800 log routine controls plotter by Fred Gutman
Electronics	O 12	p148	a	11-byte program generates 2 billion pseudorandom bits by Tomasz R Tanski
Elec. Des.	Mr29	p86	a	Plotting routine produces compact, high resolution graph BASIC by Colin J Shakespeare
Elec. Des.	Ap12	p115	a	Any random number generator can have a Gaussian distribution by Colin Gyles
Elec. Des.	N 8	p120	a	Simple, low-cost dot-joiner sharpens digital displays of analog data by Asad M Madni
Elec. Des.	N 22	p160	a	Tired of just reading results? Let your instrument do the talking by Vijay B Tandon
Elem. Elec.	Mr	p60	a	It's Simply BASIC, Solve Ohm's Law, Reactance & Frequency With Program by Larry Friedman
Interf. Age	F	p142	a	Hamming's Error Corrections by Ed Comer
Interf. Age	Ap	p90	a	Mail Code Sort and Print Program by Jim Huffman
Interf. Age	Ag	p68	a	Video Game Techniques in North Star BASIC for the SQL VDM-1 by Robert C A Goff
Interf. Age	Ag	p80	a	T V Pattern Generator by Robert Harr & Gary F Poss
Interf. Age	Ag	p83	a	Computer Implementation in A Small Business: Software Selection by Roger Williams
Interf. Age	Ag	p150	a	Tabcount: A Counter for Your Edit Buffer by Alan R Miller
Interf. Age	S	p88	a	How to Write Form Letters That Look Like the Real Thing by John MacDougall
Interf. Age	D	p87	a	The Techniques of Data Entry by William L Colsher
Interf. Age	D	p129	a	PEEK and POKE A Total by Douglas L Jones
Kilobaud	F	p98	a	Manipulating ASCII Data packing and unpacking techniques by Jack Ward
Kilobaud	F	p104	a	Read any Good Books Lately? a program to test readability by Al Gerbens
Kilobaud	Mr	p76	a	Small Business Software Part 2:file maintenance & active transactions by Laurence A McCaig
Kilobaud	Mr	p92	a	I/O Programming for the Altair Disks ain't no big deal by Don Alexander
Kilobaud	My	p78	a	A Simple Mailing System, a money-making time-saver by Stephen Gibson
Kilobaud	Jy	p34	a	Revolving Charge Account Calculations by Len Gorney
Kilobaud	Ag	p90	a	Computer-Generated Signs: Put Your TTY to Work! by Joseph J Roehrig
Kilobaud	S	p32	a	At Last: A Client Timekeeping System by Bill Welborn
Kilobaud	S	p46	a	Metric-American Conversion Program by Mickey Ferguson
Kilobaud	O	p40	a	Depreciation Calculations by John Musgrove
Kilobaud	O	p102	a	A Useful Address List Program by Sherman P Wantz & Brian E Bateman
Kilobaud	N	p46	a	Point of Sale/Inventory Control System for 8080s by Bruce A Barker
Kilobaud	N	p50	a	inancier/Mortgage with Prepayment (from Instant Software) by D Borland
Kilobaud	D	p32	a	The Art of Generating Expense Reports
Kilobaud	D	p64	a	Spelling Bee by David B Moody
Kilobaud	D	p80	a	The Ups and Downs of Business by Jim Wright
Micro	F	p11	a	Hold That Data by Gary L Tater
Micro	F	p19	a	Typesetting on a 6502 by Robert M Tripp
Micro	D	p15	a	Computer-Determined Kinetic parameters In Thermal Analysis by L S Reich
Modern Elec	My	p92	a	Program: Will the real Pi please stand up? by Pete Stark
Modern Elec	Ag	p20	a	Program: Membership list program for clubs, etc. by Carmine W Prestia
PCW	Je	p66	a	The Small System Approach to Program Editing by Patrick Sutton
PCW	Jy	p66	a	Making A Splash. Compute Your Football Pools Entry by F Heathman
PCW	D	p53	a	STATPACK by Colin Chatfield
Peoples	Mr	p44	a	Prayer Wheel Program by Edrid
Peoples	N	p26	a	Distance and Error Correcting Codes by Tom Dwyer & Margot Critchfield
Per. Comput.	Ja	p24	a	Scaling the Cliffs of Computer Mastery Part I by Ramond Howell

## PROGRAMMING & SOFTWARE: APPLICATION PROGRAMS continued

Per. Comput.	Ja	p85	a	BANNER FUN by Ed Bernstein
Per. Comput.	F	p81	a	Touching Down On: Computer Football (How the game is played) by Joe Roehrig
Per. Comput.	Mr	p24	a	The Bob-Up Program by Sam Newhouse
Per. Comput.	Mr	p57	a	Deep In the Heart of Taxes, A Tax Program for Personal Computers by Joe Roehrig
Per. Comput.	My	p38	a	If It's Tuesday.. This Must Be Seattle (Trip Planning Program)
Per. Comput.	Je	p28	a	Contract Fulfillment by Sam Newhouse
Per. Comput.	Je	p39	a	Printing Contract Forms by Charles A Matz
Per. Comput.	Je	p54	a	Partner Matching by Harriet Morrill
Per. Comput.	Jy	p43	a	Music In Your Memory; Album Sorting by Rodger Pogue
Per. Comput.	Ag	p23	a	Computing on the Rocks (Drink Mixing) by Sam Newhouse
Per. Comput.	Ag	p59	a	Check Register Acctng Syst: The Computer Checks into the Balancing Act by O E Dial
Per. Comput.	O	p43	a	The Computer Checks Into the Balancing Act Part II by O E Dial
Per. Comput.	N	p55	a	The Computer Checks into the Balancing Act. Part III by O E Dial
Per. Comput.	D	p34	a	Phone Directory by Gary Greenberg
ROM	F	p24	a	The Mailing List Program by Robert Osband
ROM	F	p66	a	Western Easter & When They Come by Lichen Wang
ROM	F	p84	a	Translate! (8K BASIC to Disk Basic) by Gordon Morrison
Radio Elec.	Je	p57	a	Integer Multiplication and Division Routines for the 8080
Radio Elec.	Jy	p56	a	Computer Program: Know What Your Long Distance Calls Cost by Fred Blechman
Radio Elec.	Ag	p32	a	Investment Evaluation Program by Fred Blechman
Radio Elec.	N	p16	c	Correction for TRS80 Investment Program (Radio Elec Aug '78) by Fred Blechman

## PROGRAMMING & SOFTWARE: ASSEMBLERS & MONITORS

Byte	Jy	p112	a	BASIC to Assembly Language Linkage by Pat Fitzgerald
Byte	D	p92	a	Z-80 Assembler by Patrick A Crowe
Dr. Dobbs	Ja	p6	l	Challenging Challenger's ROMs, 6502 Disassembler by Stephen P Smith
Dr. Dobbs	Mr	p3	c	6502 Disassembler Fix (DDJ Jan '78) by Stephen P Smith
Dr. Dobbs	Ag	p39	c	Yet Another 6502 Disassembler Fix (DDJ Jan '78 p6) by Bennett Meyer
Dr. Dobbs	Ja	p38	a	An 8080 Disassembler and Support Software for SOL by Don Van Dyke
Dr. Dobbs	Je	p42	a	A Z-80 Disassembler in TDL 8K BASIC
Dr. Dobbs	Ag	p4	a	A Compact 8080 Disassembler & Dumper by Richard Greenlaw
Dr. Dobbs	S	p32	l	Monitors for the 6800 by Chuck Adams
Interf. Age	F	p76	a	BASIC Cross Assembler for the 8080 by Peter Reece
Interf. Age	F	p144	a	TAPEMON: An 8080 Binary Tape Monitor by Alan R Miller
Interf. Age	Je	p153	a	The Westminster XEK Assembler for the North Star Disk by Alan R Miller
Interf. Age	Je	p158	a	TMS9900 Interactive Monitor Part I by Burt Johnson
Interf. Age	Jy	p163	a	TMS9900 Interactive Monitor Part II by Burt Johnson
Interf. Age	O	p132	a	GP Monitor for M6800 4K - 8K - 16K or 32K Configuration by William E Warren
Kilobaud	F	p90	a	Source Listing the Hard Way disassembling BASIC with BASIC by Clint H Woeltjen
Kilobaud	Ap	p118	a	Get a Watchdog, to monitor those real-time operations by Dave Brickner
Micro	Je	p25	a	A BASIC 6502 Disassembler for Apple and PET by Michael J McCann
Micro	Ag	p17	a	A Simple 6502 Assembler for the PET by Michael J McCann
PCW	My	p26	a	The Elegant MINMON, (Z80 Monitor) by Neil Harrison
PCW	O	p44	a	Binary Finery. Extensions to the Minmon by Neil Harrison
PCW	N	p60	a	Keeping An Orderly House. Monitors for Microprocessors by A Clements
Per. Comput.	D	p42	a	Assembler for the PET by Mark Zimmerman
ROM	F	p44	a	Assemblers by Eben Ostby

## PROGRAMMING & SOFTWARE: FUNDAMENTALS

Byte	Ja	p136	b	Practical Microcomputer Programming: the Intel 8080 by W J Weller, A V Shatzel & H Y Nice
Byte	Ja	p150	a	A Novice's Eye on Computer Arithmetic by Wayne Ledder
Byte	Ap	p18	a	A Introduction to Tables by F James Butterfield
Byte	Ap	p40	a	Optimization: A Case Study by William Noyce
Byte	Ap	p155	a	Avoid Self-Modifying Code by Don Kinzer
Byte	My	p161	b	The Elements of Programming Style by B W Kernighan & P J Plauger
Byte	Je	p136	a	Beware Compromising the Stack Pointer by Tom Pittman
Byte	S	p68	a	Some Words About Program Structure by Albert D Hearn
Calc. Comp.	Ja	p34	a	Techniques for Teaching BASIC to Beginners by LeRoy Finkel
Calc. Comp.	F	p5	a	8080 Machine Language Programming for Beginners by Ron Santore
Calc. Comp.	F	p60	a	The FOR-NEXT Loop by Larry Trice
Calc. Comp.	Mr	p44	a	8080 Machine Language Programming for Beginners by Ron Santore
Calc. Comp.	Ap	p57	a	8080 Machine Language Programming for Beginners; The Input Subroutine by Ron Santore
Calc. Comp.	My	p25	a	8080 Machine Language Programming or Beginners; HI-LO (Game) by Ron Santore

## PROGRAMMING &amp; SOFTWARE: FUNDAMENTALS continued

Calc. Comp.	My	p54	a	Excerpts from Teach Yourself BASIC Book 2 by Bob Albrecht
Calc. Comp.	S	p4	a	Big BASIC (Learning to write a Computer Game Program) by Flora Russ
Calc. Comp.	S	p82	a	8080 Machine Language Programming for Beginners (Button-Button Game) by Ron Santore
Comp. Des.	N	p158	a	Interfacing Fund: Assembly Language or BASIC, Which Way to Go? by D Larsen, P Rony, C Titus & J Titus
Cr. Comput.	Ja	p24	a	Programming Techniques: File Structures (Part 2) by John Lees
Cr. Comput.	Ja	p56	a	The Mechanical Man (Flowcharting) by Ken Lebeiko
Cr. Comput.	Ja	p58	a	The 8-hour Wonder, All About BASIC Programming in One Long Day by Thomas A Dwyer
Cr. Comput.	Mr	p54	b	Logical Construction of Programs by Jean Dominique Warnier
Cr. Comput.	Mr	p96	a	"Programming Is Learned by Practice, Not By Listening" by Jurg Nievergelt & Karl L Zinn
Cr. Comput.	Jy	p112	a	What is BNF (Backus-Naur Form)?
Dig. Design	N	p20	a	Program Design: Beware of flowcharting pitfalls by Lance Leventhal & William Walsh
Dr. Dobbs	Ja	p8	a	Is Your Assembly Language Program Well Structured? by Webb Simmons
Dr. Dobbs	F	p5	a	Decoding Efficiency & Speed: Pros & Cons of Table Look-Up by H T Gordon
EDN	Mr5	p75	a	The Software wall, and what you need to scale it by Jack E Hemenway
EDN	Je20	p89	a	Lost in Memory? Draw a map by Richard A Rosner
EDN	N 20	p251	a	EDN Software Systems Design Course by Jack Hemenway
Elec. Des.	My24	p228	a	Developing uC software requires a thorough knowledge of uP operation by D Philip Burton & Arthur L Dexter
Elec. Des.	Je7	p116	a	Develop cooperative uP subroutines that exchange info w/out hogging mem. by Stanley Mazor & Charles Pitchford
Elec. Des.	Je7	p122	a	Reduce your uC systems overhead with a system monitor analysis by Wes Patterson & Kurt Frisbie
Elec. Des.	Ag2	p84	a	Develop software with flowgrams rather than flowcharts by Tony Karp
Elem. Elec.	My	p81	a	e/e Microprocessors, Their Number Systems and Codes
Elem. Elec.	Jy	p75	a	Microprocessors, Their Number Systems and Codes
Interf. Age	F	p157	a	Random Files Illustrated by Frederick E LaPlante
Interf. Age	Ap	p160	a	DOCUMENTATION: Users can't do without it; but programmers can...or ?? by Tom Fay
Interf. Age	My	p96	a	Inside ASCII Part I by R W Beamer
Interf. Age	Jy	p154	a	"A Usable Data Base"...What, Why, and How to Use It! by William Turner
Interf. Age	Ag	p103	a	Implementing Random Access for a Name and Address Retrieval System by Gary Young
Kilobaud	Ja	p14	b	How to Program Microcomputers by William Barden
Kilobaud	Ja	p70	a	Understanding Loaders bootstrap, absolute, relocatable, etc. by T W Parsons
Kilobaud	Ja	p82	a	Help for Beginning Programmers nine basic principles ease frustrations by John Leslie
Kilobaud	F	p16	a	uComputers/uProcessors: Hardware, Software & Applications by Hilburn & Julich
Kilobaud	Mr	p6	b	Computer Algorithms and Flowcharting by Silver & Silver
Kilobaud	Mr	p42	a	Number Crunching Time, algebra the easy way by Mel Baker
Kilobaud	Ap	p86	a	Explained: String Interpretations, parsing techniques for the 6800 by Gary Gaugler
Kilobaud	My	p48	a	Computer Math Primer, beginner's introduction to number systems by Peter Stark
Kilobaud	Ag	p40	a	Software Debugging for Beginners by John Leslie
Kilobaud	S	p80	a	Error-Correcting Techniques by Gary J Shannon
Kilobaud	N	p114	a	Loop the Loop, What is it? How do you use it? by James Gross
Kilobaud	D	p94	a	How to Write Good Application Programs by Kamal Shah
Modern Elec	Je	p11	a	Computers: Bytes, bits, decimals, etc Computer Machine Language by Pete Stark
PCW	My	p39	a	Flowchart Your Way Out Of Trouble by V S Nicola & G Percival
PCW	My	p42	a	Basic Pontoon by Guilbert Percival
PCW	Jy	p11	a	Faster, More Efficient Programs by Sheridan Williams
PCW	Jy	p29	a	Programming: A Personal Approach by Stephen Holden
PCW	Ag	p22	a	From Ideas to Programmes
PCW	Ag	p27	a	Take It Or Leave It; NIM-An Exercise in Flowcharting by Roger Hargrave
PCW	S	p30	a	A First Course, Bits and Bytes by Robert Henely
PCW	O	p41	a	Assembly Code Programming for the Beginner by Stephen Collins
PCW	D	p19	a	As Per Your Instructions...Understanding Instructions & Data Coding by Victor Nicola
PCW	D	p45	a	Brains v Brawn, The Evolution of a Computer Program by Oliver Dixon
Per. Comput.	Ja	p61	a	Linear Programming: What's that? by Paul Whittington
Per. Comput.	F	p69	a	Scaling the Cliffs to Computer Mastery Part II by Raymond Howell
Per. Comput.	Mr	p22	a	Program Linking by O E Dial
Per. Comput.	Mr	p46	a	Machine Language by John Palmer
Per. Comput.	Ap	p32	a	Computer Heuristics If at first you don't succeed... by David Galef
Per. Comput.	Ap	p46	a	Algorithms and Flow Diagrams, Step-By-Step Problem Solving by B A Scott

## PROGRAMMING & SOFTWARE: FUNDAMENTALS continued

Per. Comput.	Je	p76	a	Relocatable Routines by Robert Irving
Per. Comput.	Je	p79	a	Inside A Microcomputer: About programming Languages
Per. Comput.	Jy	p35	a	Using Tables for Machine Language Programming by Steve A Hughes, Joe Celko & Elizabeth M Hughes
Pop. Elec.	Mr	p52	a	Micro-Processor Microcourse Part 1 Numbering Systems by Forrest M Mims
Pop. Elec.	Jy	p88	a	Computer Bits: Computer Arithmetic by Hal Chamberlin
Pop. Elec.	S	p108	a	Computer Bits: Computer Arithmetic-Multiply and Divide by Hal Chamberlin
Pop. Elec.	N	p122	a	Computer Bits: Computer Arithmetic-Floating Point by Hal Chamberlin
ROM	F	p54	a	FLOW GRAMS A New Programming Tool by Tony Karp
ROM	Mr	p34	a	Incomprehensible Programs by Joseph Weizenbaum
Radio Elec.	Je	p47	a	how to Program a Computer by Art Kleiman
73	O	p146	a	Interrupts Made Easy - for 8080/S-100 users by Jim Marr

## PROGRAMMING & SOFTWARE: OPERATING SYSTEMS

Dr. Dobbs	Ja	p10	a	ISIS: Anatomy of a Real-World Operating System by Perry C Hutchison
Dr. Dobbs	Je	p3	l	More on UNIX and More... by Jim Howell & Mary Elizabeth Kroening
Dr. Dobbs	Ag	p3	l	UNIX Dialog Continues by Jeff Levinsky
Elec. Des.	Je21	p94	a	Operating Systems enhance uCs with big computer muscle by Gus Burzio
Elec. Des.	Ag16	p108	a	Let your uC tackle several programs with a multitasking operating system by David L Rippes
Interf. Age	Je	p42	a	Southern California Users of RT-11 by Mark Bartelt
Interf. Age	Jy	p156	a	CP/M: An 8080 Disk Operating System with Editor, Assembler & Debugger by Alan R Miller
Interf. Age	D	p130	a	CP/M: An 8080/280 Disk Operating System. Part 2: Macro Assembler etc. by Alan R Miller
Kilobaud	Ap	p30	a	CP/M Primer, a most sophisticated operating system by John F Stewart
Kilobaud	O	p72	a	The Latest in Operating Systems for the 6800: FLEX by Mickey Ferguson
Mini Micro	Ap	p64	a	UNIX by Malcolm L Stiefel

## PROGRAMMING & SOFTWARE: STRUCTURED PROGRAMMING

Byte	Ja	p122	a	Structured Programming with Warnier-Orr Diagrams (Coding the Program) by David A Higgins
Byte	F	p135	l	Baking Baker (structured programming) by Shal Farley
Byte	Mr	p14	l	Comments on Programming and Design Style by Douglas Drury
Byte	My	p145	a	Warnier-Orr Diagrams: Some Further Thoughts by G T Wedemeyer
Byte	My	p161	b	The Elements of Programming Style by B W Kernighan & P J Plauger
Byte	Je	p124	a	The Importance of Choice Languages by I R MacCallum
Byte	Jy	p32	a	Top-Down Modular Programming by Albert D Hearn
Byte	Ag	p78	a	PASCAL A Structurally Strong Language by Stephen R Alpert
Byte	Ag	p143	a	Designing Structured Programs by Chip Weems
Byte	S	p68	a	Some Words About Program Structure by Albert D Hearn
Byte	O	p10	l	Top-Down Modular Programming by Jim Fleming
Cr. Comput.	Mr	p58	a	Structured Software for Personal Computing by Alan B Salisbury
Dig. Design	O	p30	a	Structured Programming Formulates uP Program Logic by Lance Leventhal
Dr. Dobbs	Ja	p8	a	Is Your Assembly Language Program Well Structured? by Webb Simmons
Dr. Dobbs	Mr	p10	a	Strubal: A Structured BASIC Compiler by Robert D Grappel
EDN	S 20	p63	a	Simple method links modular programs by Fred Gutman
Electronics	Ja19	p97	a	Design microcomputer software like other systems-systematically by William F Dalton
Elec. Des.	S 1	p110	a	A structured higher-level language, English like TLC by Tony Karp & Marilyn Karp
Interf. Age	F	p82	a	Structured Programming In BASIC by Kamal Shah
Interf. Age	Ap	p160	a	DOCUMENTATION: Users can't do without it; but programmers can..or ?? by Tom Fay
Kilobaud	F	p84	a	Why Structured Programming? some insights to consider by Lance A Leventhal
Kilobaud	My	p68	a	The Top-Down Approach, with some practical examples by Lance A Leventhal
PCW	N	p66	a	Staying In Shape by Michael James
Peoples	My	p27	a	SKETCHCODE, A Documentation Technique for Computer Programmers by Todd Voros
Per. Comput.	My	p33	a	Structured Programming by William L Roberts

## PROGRAMMING & SOFTWARE: UTILITY PROGRAMS

Byte	F	p93	c	Correction for Psuedorandom Number Generator (Byte Nov '77 p218) by John D Leasia
Byte	F	p93	c	Correction for Programming Tidbit: Absolute Value (Byte Oct '77 p174) by Victor Kincannon
Byte	F	p168	a	A Simple Digital Filter by Robert Grappel

## PROGRAMMING &amp; SOFTWARE: UTILITY PROGRAMS continued

Byte	Ap	p46	a	Hand Assembling M6800 Relative Addresses by Ray Boaz
Byte	Ap	p148	a	BASIC Sorts by Rene E Pittet
Byte	Je	p130	a	The Need for Relocating Loaders by K P Pielmeier
Byte	Jy	p115	a	Fooling with the Stack Pointer by Tom Pittman
Byte	Jy	p119	a	Beating North Star--MITS Incompatibility (Load MITS BASIC on N. Star) by Alan R Miller
Byte	Jy	p121	l	Word of a Better Sort reference Byte Apr. '78 p143 by Neal McBurnett
Byte	N	p74	a	TIMOUT Time Delay Subroutine (8080) by Christopher Strangio
Byte	D	p108	a	An Easy Programming System by Joseph Weisbecker
Comp. Des.	Ja	p109	a	Handling Multilevel Subroutines & Interrupts in Microcomputers (F8) by James F Vittera
Comp. Des.	F	p136	a	uComputer Interfacing: Characteristics of the 8253 Programmable Timer by Marvin L DeLong, J Titus, P Rony & D Larsen
Comp. Des.	Mr	p134	a	uComputer Interfacing: A Demo Program for the 8253 Timer by D Larson, P Rony, M DeLong, C Titus & J Titus
Comp. Des.	Ap	p168	a	uC Interfacing: Integer Addition & Subtraction by C Titus, J Titus, P Rony & D Larsen
Comp. Des.	Je	p135	a	uC Interfacing: Command Decoders by C Titus, J Titus, P Rony & D Larsen
Comp. Des.	S	p101	a	Designing Interrupt Structures for Multiprocessor System by Rajen Jaswa
Cr. Comput.	Ja	p96	a	A New Fast Sorting Algorithm by Richard Hart
Cr. Comput.	N	p52	a	Profile: The CP/M Disk Operating System by Steve North
Cr. Comput.	N	p116	a	INDXA A BASIC Routine File Index by Rod Hallen
Dr. Dobbs	F	p5	a	Decoding Efficiency & Speed: Pros & Cons of Table Look-Up by H T Gordon
Dr. Dobbs	F	p10	a	A Simple Technique for Static Relocation of Absolute Machine Code by Gary A Kildall
Dr. Dobbs	F	p14	a	Relocation is Not Just Moving Programs by Richard L Roth
Dr. Dobbs	Mr	p11	a	A Z-80 Tracer by Arthur W Cline
Dr. Dobbs	Mr	p13	a	A KIM Binary Calculator by John Eaton
Dr. Dobbs	Ap	p4	a	List Processing Unraveled: Pointers, Chains, Rings & Trees by J M Terry
Dr. Dobbs	Ap	p12	a	A 1K Debugger for the Z-80 by Les Hancock
Dr. Dobbs	Ap	p20	a	8080 Quicksort by Mike Gabrielson
Dr. Dobbs	My	p34	a	EDITHA, A Revision of the Fylstra KIM-1 Editor Program by H T Gordon
Dr. Dobbs	Je	p18	a	AUTODUMP: A Memory Dumper for POLY88 Tape System by Richard B Emerson
Dr. Dobbs	Ag	p22	a	A 1K Utilities Package for the Z-80 by Les Hancock
Dr. Dobbs	Ag	p27	a	A Shorter Printer Driver for PolyMorphic's BASIC by Richard B Emerson
Dr. Dobbs	Ag	p34	a	A BASIC Renumbering Program by John B Trenhome
Dr. Dobbs	Ag	p42	a	Custom File Routines for ALS-8 by Larry Marek
Dr. Dobbs	S	p38	a	Dumping Northstar Disk Files by Titus Purdin
Dr. Dobbs	O	p3	l	Pushing 8080 Registers by Mike Gabrielson
Dr. Dobbs	O	p43	l	Clearing 6800 Memory by Mike Gabrielson
Dr. Dobbs	N	p40	a	Copying a Diskette on Intel Double Density DOS by Paul Julich
EDN	Ja5	p31	a	M6800 subroutine compares character strings by Jack E Hemenway
EDN	Ja20	p37	a	Scanning bidirectional lists with one link by Eli Sternheim
EDN	F 5	p24	a	Generate delays on your SBC 80/10 board by George Caplan
EDN	Mr5	p36	a	M6800 subroutines use stack to save X-register by Jack E Hemenway
EDN	Mr20	p52	a	Fast string-comparison routine serves the M6800 by Thomas A Pickering
EDN	Ap5	p38	a	Implement a FIFO stack with software by Robert Grappel
EDN	Ap20	p38	a	Z80 subroutine performs function-table look-up by Avram Grossman
EDN	My20	p42	a	8080 subroutine compares character strings by Cal Sondgeroth
EDN	Ag5	p54	a	6502 routine compares character strings by John T O'Donnell
EDN	Ag5	p58	a	Interactively intelligent systems require an extra effort by Robert Cushman
EDN	Ag20	p67	a	Improved M6800 routines stack X register by Kalit Kumar
EDN	S 20	p63	a	Simple method links modular programs by Fred Gutman
EDN	O 5	p83	a	3870 routine performs parity check by Robert Burckle
EDN	N 20	p84	a	Emulate RPN with 8080 stack register by Fred Gutman
Electronics	Ap27	p126	a	PROM adds bootstrap loader to Intellec-8 development system by Bernard Boule' & Simon Gagne'
Electronics	D 21	p118	a	8080's stack pointer transfers data blocks fast by Prakash Dandekar
Elec. Des.	F 15	p101	a	Multitask uP executive routine uses only six instructions by David W Johnson
Elec. Des.	My24	p246	a	Stop display jitter with software by Gregory Yuen
Elec. Des.	Ag16	p142	a	Avoid modifying your uP program when you change option ROMs by Thomas A Seim
Interf. Age	Mr	p165	a	A Relative Jump Ruler. Speeds Machine Language Programming by John S MacDougall
Interf. Age	Mr	p166	a	A 6800 Relocator by Neal Champion
Interf. Age	Ag	p22	c	Correction for A 6800 Relocator (Interface Age March '78) by Neal Champion
Interf. Age	My	p166	a	LOOK by Kenyon Swartwout
Interf. Age	My	p170	a	A Memory Catalog Program by Jim Baumgardt
Interf. Age	Ag	p21	c	Addition to Memory Catalog Program (Interf. Age May '78) by David L Johnson
Interf. Age	Je	p155	a	Insert To Stop TV Display by John Musgrove

## PROGRAMMING &amp; SOFTWARE: UTILITY PROGRAMS continued

Interf. Age	Ag	p18	l	Addition to LOOK (Interface Age May '78) by Richard H Smith
Interf. Age	S	p134	a	Copy/Sort/Search: 8080 Data Manipulation by Steven K Roberts
Interf. Age	N	p125	a	A Generalized 8080 String Sorting Routine by Chris Terry
Interf. Age	D	p10	l	Program to Sort Files by Henry Murphy
Interf. Age	D	p84	a	Sequential Files--WEDGE by Martin Knight
Interf. Age	D	p136	a	M6800 Data or Program Address Locator by Gordon W Wolfe
Kilobaud	Mr	p24	a	Hardware Program Relocation Part 2: The Software by Dr Michael Wingfield
Kilobaud	Ap	p52	a	Utility Routines, useful programs for your 6800 by James P Fentress
Kilobaud	My	p42	a	Writing Diagnostic Routines, while your machine is running by Robert Baker
Kilobaud	My	p44	a	Experiments in Software, serial to parallel conversion by Dan Stogdill
Kilobaud	My	p94	a	Strings and Things, BASIC conversion techniques by Richard Roth
Kilobaud	My	p100	a	5 Minutes or 5 Hours? sorting techniques compared by Thomas E Doyle
Kilobaud	My	p112	a	A Different Search Technique, don't just try it--benchmark it by Glen Charnock
Kilobaud	Je	p72	a	Transfer Vectors vs Absolute Addressing by William Nichparenko
Kilobaud	Je	p76	a	Error Correcting Codes by Jeffery G Towle
Kilobaud	Jy	p64	a	MIKBUG with Muscle! Microware Systems RT-68/MX by Mickey Ferguson
Kilobaud	Jy	p68	a	Little Bits: String Expansion, Square Root Routine, etc.
Kilobaud	N	p68	a	Headecimal Memory Dump by Cal R Rasmussen
Micro	Ap	p23	a	The Micro Software Catalog (Index of 6502 Software) by Mike Rowe
Micro	Je	p23	a	The Micro Software Catalog: II List of programs by Mike Rowe
Micro	Je	p39	a	A Block HEX Dump and Character Map Utility Program for the KIM-1 by J C Williams
Micro	Ag	p23	a	The MICRO Software Catalog: III by Mike Rowe
Micro	Ag	p25	a	A Debugging Aid For The KIM-1 by Albert Gaspar
Micro	Ag	p45	a	APPLE Integer BASIC Subroutine Pack and Load by Richar F Sutor
Micro	O	p5	a	Breaker: An Apple II Debugging Aid by Rick Auricchio
Micro	O	p19	a	650X Opcode Sequence Matcher by J S Green
Micro	O	p29	a	The MICRO Software Catalog IV by Mike Rowe
Micro	D	p31	a	An Apple II Program Relocator by Rick Auricchio
Micro	D	p35	a	SYM-1 Tape Directory by John Gieryc
PCW	My	p6	a	The Searcher (6800)
PCW	Je	p54	a	4 Easy Pieces: Random, Multiply, Potentiometer, Z80 Instructions by Neil Harrison
PCW	Jy	p52	a	8080 Debug Routine by Margaret Berg
PCW	S	p42	a	The Soft Facade (Front Panel Software) by G J Flanagan
PCW	S	p44	a	A Filling Routine by John Coll
PCW	S	p45	a	Statpack by Colin Chatfield
PCW	N	p45	a	The Power of Positive Tabling by R W Davy
PCW	D	p52	a	Compare by John Coll
Peoples	My	p51	a	BASIC 5 Strings (Strings for SOL 20) by Fr. Thomas McGahee
Per. Comput.	Ag	p95	a	The Random Way to Lose Your Dough (Random # Generator) by Ron Santore
Per. Comput.	O	p62	a	Scrolling with an Unseen Hand by Karen S Wolfe
Radio Elec.	Ag	p64	a	Computer Corner: A Demostration Program for the 8253 Timer by C Titus, M DeJong, D Larsen, P Rony & J Titus
73	My	p103	a	Pseudorandomness Is Just Not Good Enough - true random happiness w/ Z-80 by John Rheinstein
73	Je	p111	a	Hey! Wait For Me! - slowing computers to reading speed by Charles E Thomas
73	O	p146	a	Interrupts Made Easy - for 8080/S-100 users by Jim Marr

## PUBLIC ACCESS

Byte	F	p14	a	CIE Net: A Network of Community Information Exchanges Part 1: Beginnings by Mike Wilber
Byte	Mr	p152	a	CIE Net: A Network of Community Information Exchanges Part 2: Protocols by Mike Wilber
Byte	Ap	p168	a	CIE Net: Community Information Exchanges Part 3: Other Considerations by Mike Wilber
Byte	N	p150	a	Hobbyist Computerized Bulletin Board by Ward Christensen & Randy Suess
Cr. Comput.	Jy	p116	b	Computers and the Cybernetic Society by Michael A Arbib
Cr. Comput.	S	p108	a	Freedom and the Computer by Jon R Welton
Cr. Comput.	S	p166	a	Prospective Externals of the Xanadu Hypertext Network by Theodor Nelson
Dr. Dobbs	Ja	p6	l	Goodies from the Government by Ronald N Orr
Dr. Dobbs	Je	p44	l	Computer Network Poll by Ward Christensen
Dr. Dobbs	S	p36	a	New Computer Law by John S James
Dr. Dobbs	O	p16	a	The Dicast Project: by Jim C Warren
Kilobaud	My	p12	a	Legal Business Forum: Personal Privacy by Kenneth S Widelitz
PCW	Ag	p58	a	Computing for Everybody by Magnus Magnusson
Peoples	Jy	p34	a	Computers and Science Museums: A Public Access Model by Bob Kahn
Peoples	S	p20	a	Computers and Science Museums: A Public Access Model by Bob Kahn

## PUBLIC ACCESS continued

Peoples N p7 a Marin Computer Center by Annie Fox  
 Per. Comput. Jy p32 a Computers, Politics and Planning by Liz Einstein

## ROBOTICS

Byte Ja p11 a The Brains of Men and Machines, Part 1: Biological Models for Robotics by Ernest W. Kent, Univ of Ill.  
 Byte F p22 c Correction for Newt A Cognitive Robot (Byte June '77 p30. 44, 45) by Ralph Hollis  
 Byte F p35 a Taking the First Step (Stepper Motors) by Robert E Bober  
 Byte F p84 a The Brains of Men and Machines Part 2: How the Brain Controls Outputs by Ernest W Kent  
 Byte Mr p74 a The Brains of Men and Machines Part 3: How the Brain Analyzes Input by Ernest W Kent  
 Byte Ap p66 a The Brains of Men & Machines Part 4: The Machinery of Emotion & Choice by Ernest W Kent  
 Byte Ap p132 a Robot Simulation on Microcomputers by John Webster  
 Byte Jy p118 c Correction for: Robot Simulation on uComputer (Byte April '78 p 136)  
 Byte Ap p146 m Department of Robotics Hocum by Carl Helmers  
 Byte My p158 b The Dragons of Eden by Carl Sagan  
 Byte My p178 b Mortal Engines by Stanislaw Lem  
 Byte Ag p24 a On Building a Light-Seeking Robot Mechanism by Stephen A Allen & Tony Rossetti  
 Calc. Comp. My p11 a A Simple Microcomputer-Controlled Programmable Robot by Mike Folk  
 Comp. Des. Ja p43 a Digital Technology Enables Robots to "See" by Sydney F Shapiro  
 Cr. Comput. Ja p68 a Human Memory Processes by Susan Hastings  
 Cr. Comput. Jy p52 a Man-Machine Tactile Communication by A Michael Noll  
 Cr. Comput. Jy p105 a ROM's Robot Review Part III: Walking Through the Woods by A I Karshmer & J M Prager  
 Cr. Comput. N p124 a Robot Programming: Not As Easy As It Looks by Arthur Karshmer  
 Dr. Dobbs My p17 a Yet Another Body; Some Additions to Lichen Wang's Robot Control Language by Ken Anderson  
 Interf. Age Ap p42 a The Mind Revolution, Robotics & Artificial Intelligence by Merl Miller  
 Interf. Age Ap p62 e Robotics Editorial by Sandi McKeen  
 Interf. Age Ap p63 a Where Robot Mice And Robot Men Run Round in Robot Towns by Ray Bradbury  
 Interf. Age Ap p65 a The History of Robots by Forest Ackerman  
 Interf. Age Ap p69 a The Quasar Industries' Robot; A Dream That Came True by Gene Beley  
 Interf. Age Ap p74 a From Steam Engines to Robots...The Hierarchies of Robotic Devices by F W Chesson  
 Interf. Age Ap p78 a Star Wars; Special Production and Mechanical Effects by John Stears  
 Interf. Age Ap p80 a A Natural Approach to Artificial Intelligence by Roger C Garrett  
 Interf. Age Ap p85 a Robots in Manufacturing by Ashok K Nagrani  
 Interf. Age Ap p101 a ROBOTS: Making Them Work by Roger C Garrett  
 Interf. Age Ap p104 a Robbie and Gronk Mobile Robots by Keith Paul  
 Interf. Age Ap p110 a The 8085 in Robot Design by Frank Da Costa  
 Interf. Age Ap p112 a A Vocal Interface for Your Robot by Frank DaCosta  
 Interf. Age Ap p156 a ARASEM: A Programming Approach for Robots by Frank DaCosta  
 Interf. Age My p32 a The Mind Revolution; What is a Robot?...Intelligence? by Merl Miller  
 Interf. Age Je p8 l Letters about the Quasar Robot  
 Interf. Age Je p24 a The Mind Revolution; Robots vs Controllers by Merl Miller  
 Interf. Age Jy p33 a The Mind Revolution by Merl Miller  
 Interf. Age Ag p52 a The Amazing Micro Mouse Contest  
 Interf. Age S p42 a The Mind Revolution, History of Robots, etc. by Merl Miller  
 Interf. Age O p43 a The Mind Revolution: Robot History by Merl Miller  
 Interf. Age D p42 a The Mind Revolution: Book List by Merl Miller  
 Modern Elec My p44 a Make your own R2-D2 robot sound effects by David L Heiserman  
 Modern Elec O p55 a Powering Your Robot by David Heiserman  
 Peoples Ja p54 a A Carefull Bull in the China Shop; A cheap Approach to Robotics by Robert Rossum  
 Peoples Mr p51 a The Patter of Little Feet; A Cheap Approach to the Mechanics of Robotics by Robert Rossum  
 Peoples Jy p13 a ROBOTS in LITERATURE and in LIFE by Loretta Graziano  
 Peoples Jy p16 a And It Will Serve Us Right by Isaac Asimov  
 Per. Comput. F p56 a Building Your BASIC Robot by Sam Newhouse  
 Per. Comput. O p39 a The "Grivet", A New Traveling Companion for the Microcomputer by Harry Shershaw  
 ROM Ja p22 a Synthetic Skin for Your Robot and How to Make It by Stephen J Chiodo  
 ROM F p14 a AIQuotient: ROM's Robot Review Part 1: History-ROMance to Reality by A I Karshmer  
 ROM Mr p18 a ROM's Robot Review Part 2: Quasar-Fact, Fancy or Fraud by A I Karshmer

## ROBOTICS continued

Spectrum N p62 a Three Amazing Micromice: Hitherto Undisclosed Details by Roger Allan

## SERIAL I/O

Byte	N	p136 a	Transmission of Digital Data Over Twisted Pair Lines by Edward Beebe
Comp. Des.	F	p12 a	Asynchronous Timing Error Characteristics by John E Buckley
Comp. Des.	Mr	p14 a	Synchronous Timing Error Characteristics by John E Buckley
Comp. Des.	Jy	p77 a	Serial Communication Protocol Simplifies Data Trans. & Verification by John Fletcher
Comp. Des.	Ag	p103 a	Code Conversion Techniques for Digital Transmission by S Ghosh
Comp. Des.	Ag	p112 a	Interval Timer Serves as a Baud Rate Generator 8253 by John Beaston
Comp. Des.	D	p85 a	Wideband Communication System Improves Response Time by James F Wanner
EDN	Mr20	p87 a	uP-based data communications involves more than mere I/O by Charles J Gillespie
EDN	Ap20	p124 a	Before loading programs, implement a software UART by Jack E Hemerway
EDN	Ag20	p89 a	Serial I/O thrusts Indecomp into asynchronous communications by John Conway
EDN	S 5	p119 a	CRC Error-detection scheme ensure data accuracy by Krishna Rallapalli
EDN	O 20	p109 a	Simplify serial data links with LSI chips by Alan J Weissberger
EDN	N 20	p81 a	UART adds fast I/O to 6502 system by Carl W Moser
Electronics	Mr16	p123 a	Communications chip interfaces with most microprocessors (ACE) by Sam Travis
Electronics	Je8	p104 a	Data Link Control Chips: Bringing order to data protocols by Alan Weissberger
Electronics	D 21	p89 a	What designers should know about off the shelf fiber optic links by Harvey Hindin
Elec. Des.	Ap26	p42 a	IC push into data communications relieves processors, cuts software by Dick Hackmeister
Elec. Des.	S 13	p124 a	RAM-based multiplexer systems can save big chunks of hardware by Zaheer M Ali
Interf. Age	O	p46 a	From the Fountainhead: Serial Communications by Adam Osborne
Kilobaud	My	p44 a	Experiments in Software, serial to parallel conversion by Dan Stogdill
Kilobaud	Ag	p108 a	Who Needs a UART? by F J Greeb
Kilobaud	N	p38 a	Kilobaud Klassroom #14: Parallel and Serial I/O Ports by Peter A Stark
Kilobaud	N	p84 a	Build a Serial to Parallel Converter by F R Ruckdeschel
Kilobaud	D	p70 a	Two Interface Boards from Teletek; Serial, Tape by Mitchell Wolrich & Jeff DeTray
Kilobaud	D	p100 a	Sharing Scheme for RS-232 Channels by Robert Bosen
Micro	Ag	p5 a	Design of a PET/TTY Interface by Charles R Husbands
Mini Micro	Jy	p74 a	Coping With Data Transmission Errors by Terry Smetanka
Radio Elec.	My	p45 a	Digital Data Transmission-How A Computer Communicates by Phil Hughes

## SHOWS &amp; CONVENTIONS

Byte	F	p178 a	New York Notes by Chris Morgan
Byte	Jy	p16 a	The Second West Coast Computer Faire by Chris Morgan
Byte	S	p10 a	The NCC '78 Personal Computer Show by Chris Morgan
Cr. Comput.	S	p34 a	Random Ramblings, Random Ramblings, Random Ramblings..... by David H Ahl
Cr. Comput.	N	p62 a	Personal Computing '78 by John Craig
Electronics	My25	p157 a	NCC eyes new roles for computer with emphasis on energy problem by Raymond P Capece
Electronics	Ag31	p156 a	Telecommunications, microprocessors share star roles at WESCON
Interf. Age	Ja	p39 a	Programming The Human Computer; How To Get The Most Out Of A Convention by Merl Miller
Kilobaud	Je	p36 a	A Tour of the Faire (Part 1) by John Craig
Kilobaud	Jy	p36 a	A Tour of the Faire (Part 2) by John Craig
Kilobaud	Je	p67 a	Personal Computer Shows by Paul J Terrell
PCW	N	p41 a	Personal Computer World, Our Show
Peoples	My	p24 a	A Faire View by Jef Raskin

## SIMULATION &amp; COMPUTER MODELING

Byte	Ja	p144 a	Simulation of Motion, Part 3: Model Rockets and Other Flying Objects by Stephen P Smith
Byte	My	p155 c	Correction for: Simulation of Motion Part 3 (Byte Jan '78) by Stephen P Smith
Byte	F	p42 a	Simulation of Motion Part 4: Extended Objects, Applications for Boating by Stephen P Smith
Byte	F	p52 a	Add a \$3 Light Pen to Your Video Display by John Webster and John Young
Byte	Ap	p64 c	Correction for Simulation Article (Byte Nov '77 p18) by Jack W Crenshaw
Byte	Ap	p132 a	Robot Simulation on Microcomputers by John Webster
Byte	Jy	p118 c	Correction for: Robot Simulation on uComputer (Byte April '78 p 136)
Calc. Comp.	F	p48 a	Whale Watching at San Diego, Calif. Gray Whale (Computer Simulation)
Calc. Comp.	F	p53 a	Stimulating Simulations by C William Engel

## SIMULATION &amp; COMPUTER MODELING continued

Calc. Comp.	Ap	p85	a	California Gray Whale; Computer Simulation
Calc. Comp.	S	p66	a	How to Get Dead Drunk and Survive (Do it as a Computer Simulation!) by John Cook
Comp. Des.	Mr	p116	a	Computer Simulation Program for a Second Generation Handheld Calculator by Ronald Zusman
Cr. Comput.	Ja	p26	a	SFS Walletsize Space-Shuttle Simulator
Cr. Comput.	Ja	p48	a	World 2 (Simulation) by James L Murphy
Cr. Comput.	Ja	p88	a	How to Write a Computer Simulation by David H Ahl
Cr. Comput.	Mr	p54	b	Global Simulation Models: A Comparative Study by John Clark & Sam Cole
Cr. Comput.	My	p34	a	Modelling the Cat Falling
Cr. Comput.	My	p81	b	Stimulating Simulations by C W Engel
Cr. Comput.	My	p88	a	Computer Animation: Out of the Lab and Onto the TV Screen by Arthur Bellaire
Cr. Comput.	S	p69	a	Computer Simulations and Problem-Solving in Probability by John S Camp
Cr. Comput.	S	p72	b	Books on Business Games and Simulation Techniques
Cr. Comput.	S	p74	a	Jury Selection: A Simulation by Gary Greenberg
Cr. Comput.	S	p78	a	Real World Games (Management Decisions) by Robert D Chadbourne
Cr. Comput.	S	p82	a	Simulation and Gaming References
Cr. Comput.	S	p104	a	A Computer Activity for Building a Linear Model of Data by Kenneth J Travers
Cr. Comput.	S	p121	a	Evaluating Stock Options or How to Lose it a Little Slower by Allen C Hagelberg
Interf. Age	F	p56	a	SFS Walletsize Spaceship Simulator Part I by Lance E Strickler, John H Buffington & Ivy Fleck Strickler
Interf. Age	F	p161	a	Programmable Calculator Modeling of Experimental Data by M Patt, J R A Lemieux & L Fisher
Interf. Age	Mr	p60	a	SFS Walletsize Spaceship Simulator Part II
Interf. Age	My	p8	1	Programmable Calculator Modeling of Experimental Data for TI59 by L Fisher, J R A Lemieux & M Patt
Interf. Age	N	p122	b	Star Ship Simulation by Roger Garrett
Kilobaud	Ap	p13	b	Simulating Simulations by C William Engel
Kilobaud	Ap	p82	a	Kid Korner. Cash Register: a practical math simulation by John Eric Victor
Kilobaud	Je	p18	c	Correction for 8080 Simulator (Kilobaud Sept '77) by Rick Beutnagel
PCW	My	p59	a	Cutting the World Down to Size by Werner Sieber
Peoples	My	p16	a	Casino, A Small System Simulator by Borge Christensen
Peoples	My	p44	b	Simulating Simulations by C William Engels
Peoples	Jy	p48	a	Gambler's Paradox; A Lesson in Coin Tossing Using Computer Simulation by Bob Kahn
Per. Comput.	Ja	p89	a	Boxing by Computer by Joseph J Roehrig

## SPEECH

Byte	Je	p56	a	Give an Ear to Your Computer; A Speech Recognition for Experimentors by Bill Georgiou
Byte	Je	p142	a	Add a Voice to Your Computer for \$35; Talk to Me! by Steve Ciarcia
Calc. Comp.	S	p42	a	Hi! I'm Your Speak & Spell by Bill Kernahan
Comp. Des.	Mr	p128	a	Oral Annunciator with Programmable Vocabulary
Comp. Des.	S	p200	a	Monolithic PMOS Speech Synthesiser Models Vocal Tract on a Single Chip
Comp. Des.	N	p188	a	Single Chip Speech Synthesizers by Scott Smith
Cr. Comput.	My	p36	a	Profile: Ai 1000 Speech Synthesizer (and our talking tennis game) by Steve North
Cr. Comput.	My	p38	a	Tennis Match. A Talking Game! by Steve North
Cr. Comput.	S	p62	a	Profile: Computalker CT-1 Speech Synthesizer by Steve North
Dig. Design	F	p86	a	Speech Synthesis, Make Computers TALK! by Michael Chester
Dr. Dobbs	S	p42	a	Vocal Memory Dump by Phil Mork
Dr. Dobbs	O	p30	a	Data-Boy Speech Processor by James Anderson
EDN	F 5	p19	a	uC-based key-to-speech synthesizer gives stroke victims a voice by Sam Davis
Electronics	Je22	p39	a	Single silicon chip synthesizes speech in \$50 learning aid
Electronics	Ag31	p109	a	Three-chip system synthesizes human speech by Richard Wiggins & Larry Brantingham
Elec. Des.	Jy19	p32	a	Here's a breakthrough-a low-cost speech synthesizer on a chip TI by Nicholas Bodley
Interf. Age	Ap	p112	a	A Vocal Interface for Your Robot by Frank DaCosta
Per. Comput.	Mr	p35	a	Speech Synthesizer Makes Computers Talk by Michael Chester

## STANDARDS

Byte	Ja	p120	m	When is ASCII Not ASCII?
Byte	F	p19	a	Complete ASCII by David M Ciemiewicz
Byte	F	p175	a	A Standard for Writing Standards by David Wallace
Byte	Mr	p148	a	The Altair (S-100) Bus Forum: PCC 77 by John McCallum

## STANDARDS continued

Byte	My	p163	a	Standardization of High Level Languages: Some Questions by E M Greene
Comp. Des.	N	p170	a	IEEE488: A Proposed uC I/O Bus Standard by Bert E Forbes
Dr. Dobbs	My	p40	a	Proposed Standard for the S-100 BUS by George Morrow
Dr. Dobbs	N	p18	a	Programming Languages and Standards by David Chapman
Dr. Dobbs	N	p34	a	The STD Bus: A Critical Look at a Proposed New Standard by Keith Britton
EDN	F 20	p97	a	uC bus standardization--Will designers' needs be met? by Robert H Cushman
EDN	Ap5	p77	a	uC bus standardization makes (dollars and) sense by Carol A Ogden
Electronics	Jy20	p113	a	Microprocessor bus standard could cure designers' woes (Microbus) by Gordon Force
Electronics	D 7	p143	a	Standard symbols let designers grasp logic operation quickly and easily by Bill King
Interf. Age	My	p96	a	Inside ASCII Part I by R W Bemer
Interf. Age	Je	p64	a	Inside ASCII Part II by R W Bemer
Interf. Age	Jy	p80	a	Inside ASCII Part III by R W Bemer
Interf. Age	Je	p146	a	IAPS: International ASCII Publication Standard; Making Tapes on 8080 Sys by Alan R Miller
Interf. Age	Ag	p122	a	A Designer's Notes On The S-100 Bus Standard Proposal Prel. Specs. by Kells A Elmquist
Interf. Age	N	p74	a	International ASCII Publishing Standard (IAPS) Notebook by Bill Turner
PCW	Je	p69	a	E78 The Europa Bus; A uProcessor Bus Spec. for EUROCARD by Bob Cottis, Dave Howland & Pat Crowe
PCW	Jy	p76	c	Correction for E78 Bus Specification (PCW Jun '78)

## STORES &amp; ENTERPRISES

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## C

Calebotta, Stephen - Mem: RAM  
 Camp, John S - Math. Simulation  
 Campbell, A R - Calc Prog, # Base Conv.  
 Camus, Armand L - Music  
 Capece, Raymond P - Mem: Gen, uC Gen., uP General.  
     Shows  
 Caplan, George - Prog: Utility  
 Carinalli, Charles - Terminals  
 Carlson, Owen - Business Acct  
 Carpenter, Charles R - Tiny BASIC, Tiny Languages,  
     Mem: RAM, Apple uC, Music, Printer  
 Carr, Joseph J - Analog Hard., Debug, Digital.  
     Power Supply  
 Carsie, Justus - Humor  
 Carson, Fletcher Thane - Game: Computer  
 Cashman, Thomas J - Prog: Gen  
 Castleman, Kenneth R - Mem: Gen, Heath uC  
 Caudell, Garry O - Code Conv., SWTPC uC  
 Cawthon, Roy - Weather  
 Cecil, Alex - Other Languages, 8080 uP  
 Celko, Joe - Prog: Fund  
 Chadbourne, Robert D - Business Gen, Simulation  
 Chamberlin, Hal - I/O, Interface, Keyboard,  
     Mem: Gen, 6502 uP, Prog: Fund, Video Displ.  
 Champion, Neal - Prog: Utility  
 Chandra, A K - I/O  
 Chapman, David - Lang. Gen., Standards  
 Charnock, Glen - Prog: Utility  
 Chatfield, Colin - Experience. Prog: Applic.,  
     Prog: Utility  
 Cheairs, L Steven - Construc, Debug, Game: Elec.  
     Cosmac uP  
 Check, W - Analog A/D, Other uP's

Chellberg, W S - Applic. Gen  
 Cheng, E - Analog A/D, Other uP's  
 Chepko, Milan D - Game: Computer, Tiny BASIC  
 Cherlin, Mokurai - APL, Tiny Languages  
 Chesson, Frederick W - Code Conv., History. Robots  
 Chester, Michael - Speech  
 Chetty, P R K - Power Supply  
 Chioco, Stephen J - Robots  
 Chirlian, Paul M - BASIC  
 Chisenhall, Ronald - Video Displ.  
 Chown, Derek J - Calc Prog. Game: Calc  
 Christensen, Alan K - Graphics, PET uC  
 Christensen, Borge R - Game: Computer, BASIC,  
     Other Languages, Simulation  
 Christensen, Ward - I/O, Public Access  
 Christy, Peter - uC Des  
 Chu, Paul - Mem: RAM  
 Chung, Kin-Man - Pascal  
 Ciarcia, Steve - Analog A/D, Control, Debug,  
     Displays 7-seg, Home, I/O, Keyboard,  
     Mem: PROM, Power Supply. Speech, Test Equip.,  
     Video Displ.  
 Ciemiewicz, David M - Definitions, Standards  
 Cirillo, Tom - Business Acct, Prog: Applic.  
 Clark, C - Calc Prog  
 Clark, Douglas W - Education, Math  
 Clark, John - Simulation  
 Clark, Tom - Debug  
 Clark, Vernon R - Weather  
 Clarke, Sheila - Music, Printer  
 Claybaugh, Scott - Music  
 Clements, A - Prog: Assembler  
 Cletheroe, J - Math Problems  
 Cline, Arthur W - Z-80 uP, Prog: Utility  
 Clyde, Donald - Math Problems  
 Coan, James S - BASIC  
 Cobough, Robert - Construc  
 Cohen, Harvey - Game: Computer  
 Cohen, Martin - Game: Computer  
 Cohen, Theodore J - uC Fund  
 Cohn, Bob - Digital. Keyboard  
 Cohn, David L - 8080 uP  
 Cole, Phyllis - Hobby. Mem: Tape, Apple uC, PET uC,  
     Other uC's  
 Cole, Sam - Simulation  
 Coleman, Mick - Education  
 Coll, John - Pilot, uC Gen., uC Select, Apple uC,  
     PET uC, Prog: Utility  
 Collins, Stephen - Prog: Fund  
 Collis, Martin - Business Gen  
 Colsher, William L - Business Gen, Keyboard, BASIC,  
     Math Problems, Mem: Gen, Prog: Applic.  
 Colt, Jon - Prog: Gen  
 Colton, Mark - Mem: Tape  
 Comer, Ed - Prog: Applic.  
 Conley, David M - Game: Computer  
 Conley, Steve - Lang. Gen., Prog: Gen  
 Connolly, M R - Apple uC  
 Conway, John - Analog A/D, Debug, Mem: Gen,  
     Mem: Tape, uC Des, Serial I/O  
 Conway, Joseph C - Bit Slice uP  
 Conway, Richard - Applic. Gen, Art  
 Cook, John - Gen Interest, Simulation  
 Cook, Mike K - Music  
 Coopersmith, Larry - uC Des  
 Copes, Edward - Keyboard  
 Corbett, C - Kim uC

Corbin, Dave - Applic. Gen  
 Cornes, Phil - Printer  
 Costa, Frank Da - 8080 uP, Robots  
 Costello, Scott H - Game: Computer  
 Costlow, Terry - Other uC's  
 Cotter, Robert J - Analog A/D, Elf uC, Cosmac uP  
 Cottis, Bob - Interface, Mem: Tape, Standards  
 Couzens, Philip - BASIC  
 Covitz, Frank H - Game: Computer  
 Cox, Francis E - Interface  
 Cox, George C - Education  
 Craig, John - Hobby, uC Gen., North Star uC,  
     uP General, Prog: Gen, Shows, Stores  
 Cram, Arlene B - Game: Computer  
 Craven, Timothy C - Applic. Gen, Books  
 Creason, Sam - Amateur Radio, Music  
 Creighton, Gary A - PET uC  
 Crenshaw, Jack W - Radio Shack uC, Simulation  
 Critchfield, Margot - Graphics, BASIC,  
     Radio Shack uC, Other uC's, Music,  
     Prog: Applic.  
 Crothamel, Dr David A - Calc. Gen, Education  
 Crowe, Patrick A - Interface, Z-80 uP,  
     Prog: Assembler, Standards  
 Crowe, Sam - Fiction  
 Curtis, Judy - Construc  
 Cushman, Robert - Debug, Experience, Interface,  
     uC Fund, uP Select, Prog: Gen, Prog: Utility,  
     Standards  
 Czebiniak, John F - Keyboard

## D

DaCosta, Frank - Robots, Speech  
 Dahl, Aubrey - History  
 Daines, Derrick R - Education  
 Dalton, William F - Prog: Structured  
 Dandekar, Prakash - Prog: Utility  
 Daniel, Tim - Calc Prog, Clock  
 Davidson, James J. - Calc. Gen  
 Davidson, Melvin - Education  
 Davidson, Scott - Game: Computer, Prog: Applic.  
 Davies, Mrs Pauline - Calc. Gen  
 Davis, Henry - Digital. I/O  
 Davis, Richard - uC Select  
 Davis, Robert - I/O, Keyboard  
 Davis, Sam - Home, Medical. uC Select, Music,  
     Speech, Terminals  
 Davy, Bill - Game: Computer, 8080 uP, Prog: Utility  
 Dawkins, Gary D - Graphics, Apple uC  
 Day, Jim - Game: Chess  
 DeBruzzi, Dalward - BASIC  
 DeJong, Marvin L - Amateur Radio, Analog A/D,  
     Applic. Gen, Clock, Interface, Kim uC,  
     6502 uP, Prog: Utility  
 DeKoven, Bernie - Calc. Selec  
 DeSantis, John - Printer  
 DeTray, Jeff - Mem: Tape, Serial I/O  
 DeVita, Joseph - Mem: Disks  
 Dederick, Dan - Printer  
 Dehaven, E John - Video Displ.  
 Delaney, Dennis E - Fiction  
 Delong, Marvin L - Clock, Prog: Utility  
 Denenberg, Stu - Home  
 Dennis, Mike - Game: Computer, Logic, uC Des,  
     Radio Shack uC, Other uC's

Dershem, Herbert L - Education, Game: Computer  
 Derynck, R R - Printer, Terminals  
 Deviro, Paul M - Mem: Disks  
 Dexter, Arthur L - I/O, Interface, Prog: Fund  
 DiBlasi, Howie - Experience, Mem: Disks  
 Dial, O E - Business Acct, Math, Prog: Applic.,  
     Prog: Fund  
 Dial, William R - Books, Kim uC, 6502 uP  
 Didday, Rich - Definitions, Digital, BASIC, uC Fund  
 Dilatush, Earle - Displays 7-seg  
 Dillon, E G - 8080 uP  
 Dimock, Dick - Fiction  
 Dishman, Laurence G - Game: Computer, Math.  
     Prog: Applic.  
 Dixon, Oliver - Prog: Fund  
 Dobrowolski, Stefan T - Prog: Gen  
 Doebling, Wallace - Construc  
 Dohlen, John Van - Displays 7-seg  
 Doliner, Irwin - # Base Conv., Game: Computer  
 Dollahite, Garth - Game: Computer  
 Donahue, Mike - Education, Math  
 Donimirski, Jeremy A - Power Supply  
 Doone, Tenny - Music  
 Dougherty, Robert - Digital  
 Douglas, J R - Game: Chess  
 Doyle, Thomas E - Prog: Utility  
 Dozier, Gary - Experience, Gen Interest, Home, SOL  
 Dozier, Harold W - F-8 uP  
 Drake, Howard G - Elf uC  
 Dreher, Patrick - Displays 7-seg  
 Drewitz, Hans - Applic, Gen, Stores  
 Drexler, Kenneth - Mem: Test, 6800 uP  
 Dreyfus, Hubert L - Applic, Gen, Intelligence  
 Drury, Douglas - Prog: Structured  
 Duffy, R M - Mem: Tape  
 Dugan, Ken - Music  
 Dugan, Thomas - Mem: PROM, Prog: Gen  
 Duncan, Ray - Graphics  
 Dunkerley, William - Amateur Radio  
 Dunlop, David L - Game: Calc  
 Dunsheath, Thomas J - Math Problems  
 Duntemann, Jeff - Amateur Radio, Elf uC  
 Durniak, Anthony - uC Gen.  
 Dvorak, Neil - Control  
 Dwyer, Thomas A - Graphics, BASIC, Radio Shack uC,  
     Other uC's, Music, Prog: Applic., Prog: Fund  
 Dyk, Harley - Game: Computer  
 Dyke, Don Van - SOL, Prog: Assembler

## E

Eagle, M R - BASIC  
 Eaton, John - Calc Prog, Keyboard, Kim uC,  
     Prog: Utility  
 Eaton, Sheff - Mem: RAM  
 Eccleston, Jim - Test Equip  
 Edelson, Roger - Clock, Hobby, I/O, Interface,  
     Mem: Gen, Mem: PROM, Mem: RAM, Mem: Tape,  
     uC Fund, Other uC's, Test Equip  
 Edrid - Prog: Applic.  
 Egbert, Dr. Dwight D - Graphics, I/O, Plotter  
 Eigsti, Steve - Digital, I/O, Keyboard  
 Einstein, Liz - Gen Interest, Public Access  
 Elias, Steve - Game: Computer  
 Eliason, Andrew E - Graphics, Apple uC  
 Eliason, Andrew H - Music

Elices, Francisco - Calc Prog  
 Elie, Pierre - Digital  
 Elin, Larry - Graphics  
 Elizondo, Ed - Mem: RAM, SOL  
 Elliot, R I - PET uC, Plotter  
 Elmquist, Kells A - Interface, Standards  
 Emanuel, R B - Education, Prog: Gen  
 Emerson, Richard B - Mem: Tape, Polymorphic uC,  
     Printer, Prog: Utility  
 Emory, Thomas M - Terminals  
 Endress, Katha - Business Acct, Heath uC  
 Engel, C William - Game: Computer, Simulation  
 Englander, William - Game: Computer  
 Erickson, B - Game: Computer  
 Erikson, Sandra - Clock, Gen Interest  
 Etra, Bill - Future, Graphics, Video Displ.  
 Eufinger, Reinholdt J - I/O, uC Des, 6502 uP  
 Evans, Sandra - Education  
 Everhart, Dan - Game: Calc

## F

Fabrey, Lawrence - Calc, Gen, Math  
 Fabrey, Lawrence - Calc, Gen, Math  
 Faggin, Fredrico - uP General, Z-80 uP  
 Fahey, Robert - BASIC  
 Faraday, Michael - Apple uC  
 Farley, Shal - Prog: Structured  
 Farnell, Campbell - Bar Code  
 Farrell, Clyde R - Radio Shack uC  
 Farrell, Jim - Interface  
 Farwell, David - Analog Hard.  
 Faught, David - Lang. Gen.  
 Fay, Tom - Prog: Gen, Prog: Fund, Prog: Structured  
 Feagans, John - 6502 uP  
 Fedock, Joseph M - Amateur Radio, Calc Prog  
 Fehringer, Bernard G - Hobby  
 Feierstadt, Sy - Game: Computer, Graphics  
 Feilbogen, Peter - Stores  
 Feldman, Phil - Game: Computer, Prog: Gen  
 Felsenstein, Lee - Clock, Construc, Experience  
 Fentress, James P - 6800 uP, Prog: Utility  
 Ferguson, Bob - 6800 uP  
 Ferguson, Donald F - Lang. Gen.  
 Ferguson, Mickey - Mem: Disks, SWTPC uC,  
     Prog: Applic., Prog: Operating Sys,  
     Prog: Utility  
 Ferguson, R E L - Math  
 Fern, Mike - Books  
 Fielland, Gary - Mem: RAM  
 Filipski, Alan - Applic, Gen  
 Findley, Robert - 8080 uP  
 Finkel, LeRoy - Education, BASIC, Prog: Fund,  
     Timeshare  
 Finlay, Eric - Art  
 Firebaugh, Morris - uC Select  
 Fish, Fred - Calc Prog  
 Fisher, G D - Construc  
 Fisher, Kenneth W - Mem: Disks  
 Fisher, L - Calc Prog, Simulation  
 Fitchhorn, Donald L - Debug, Text Edit  
 Fitzgerald, Pat - BASIC, Prog: Assembler  
 Flanagan, G J - Prog: Utility  
 Fleming, Jim - Prog: Structured  
 Fleming, Gordon - Applic, Gen, Game: Computer  
 Fletcher, John - Serial I/O

Floto, Charles - Heath uC, PET uC  
 Fluhrer, Scott - I/O  
 Folk, Mike - Robots  
 Folkard-Stengel, Linda - Medical  
 Forbes, Bert E - Interface, Standards  
 Forbes, Farhad - Analog Hard., Medical  
 Force, Gordon - Interface, Standards  
 Ford, Gary A - Pascal  
 Forsyth, Charles H - Pascal  
 Foster, Bill - Education  
 Foster, Caxton C - 6502 uP  
 Fox, Annie - Public Access  
 Francis, David - Applic. Gen, Business Gen  
 Franson, Paul - Mem: PROM  
 Frauenfelder, Lewis - Mem: Tape  
 French, Gordon - Graphics, Video Displ.  
 Frenzel, Lou - uC Gen., uC Select  
 Frey, Peter W - Game: Chess, Intelligence  
 Fricke, Victor - Game: Computer  
 Friedman, Herb - Mem: Tape  
 Friedman, Larry - Applic. Gen, Business Gen,  
     Business Word Process, Game: Computer,  
     Prog: Applic.  
 Friends - Game: Computer  
 Frisbie, Kurt - Prog: Fund  
 Fritz, Kenneth - Stores  
 Frye, George J - Heath uC, Terminals  
 Fukumoto, Larry - Mem: Disks  
 Fuller, Bill - Interface  
 Fylstra, Dan - Kim uC, PET uC, Radio Shack uC,  
     Text Edit, Video Displ.

## G

Gable, G H - Mem: PROM  
 Gabrielson, Mike - 8080 uP, Prog: Applic.,  
     Prog: Utility  
 Gagne', Simon - Digital. Prog: Utility  
 Gaines, John - Education, Game: Calc  
 Galef, David - Applic. Gen, Future. Prog: Fund  
 Games, William - Graphics  
 Garen, Eric R - Digital. Mem: RAM, uP General  
 Garett, Mark - Mem: RAM.  
 Garland, Harry - Analog Hard., Medical  
 Garrard, Mimi - Control. Graphics  
 Garrett, Roger - Displays 7-seg, Game: Computer,  
     Graphics, Intelligence. Mem: Disks, Robots,  
     Simulation  
 Garrow, Robert - Other uC's, 8080 uP  
 Garson, James W - Radio Shack uC  
 Gash, Philip - Graphics, Plotter  
 Gaspar, Albert - Kim uC, Prog: Utility  
 Gasperini, Richard E - Digital  
 Gass, Geoffrey - 6800 uP  
 Gates, Reginald - Home  
 Gates, Tim - Digital  
 Gaugler, Gary D - SWTPC uC, 6800 uP, 8080 uP,  
     Prog: Applic., Prog: Fund  
 Gawronski, Jane Donnelly - Prog: Gen  
 Gaylord, Charles S - Calc Prog  
 Georgiou, Bill - Speech  
 Gerbens, Al - Amateur Radio, Analog Hard., Medical.  
     Prog: Applic.  
 Gerhold, George A - Education, Pilot  
 Gertz, Kenneth - Interface  
 Ghent, Emmanuel - Control. Graphics

Ghormley, Robert C - Analog Hard.  
 Ghosh, S - Code Conv., Serial I/O  
 Gibbons, Albert J - Lang. Gen.  
 Gibson, Stephen - Mem: Tape, Modem. Prog: Applic.  
 Gieiser, Molly - History  
 Gieryc, John - Mem: Tape, Prog: Utility  
 Giese, Madeline - Calc. Gen, Education  
 Gilbody, Peter A - Mem: Tape  
 Gilder, Jules H - Communication, Future, uC Select  
 Gille, Don - SWTPC uC  
 Gillespie, Charles J - Serial I/O  
 Gilman, Leonard - APL  
 Glaab, John A - Keyboard  
 Glass, Robert L - Experience, Humor  
 Glynn, Shawn M - Math  
 Goadby, David - Mem: PROM  
 Goede, Walter - Displays 7-seg, Video Displ.  
 Goff, Robert C A - Game: Computer, Medical.  
     Prog: Applic., Video Displ.  
 Goldberger, Alex - uC Select  
 Goodson, Bobby - Calc. Selec, Education  
 Gordon, H T - Kim uC, Prog: Gen, Prog: Fund,  
     Prog: Utility  
 Gorney, Len - Prog: Applic.  
 Gottlieb, Mark - Graphics, Plotter  
 Graham, Neil - Prog: Gen  
 Graham, Ray - Code Conv.  
 Grand, Linda A - Experience  
 Grandbois, Gary - Analog A/D  
 Grant, Richard - Fiction  
 Grappel, Robert - Analog Hard., Debug, I/O, BASIC,  
     Tiny Languages, Prog: Structured,  
     Prog: Utility  
 Grater, Bob - Construc  
 Graves, David - Interface  
 Gray, Lawrence - Other Languages  
 Gray, Marty - Mem: Tape  
 Gray, Stephen B - Books, Business Gen,  
     Business Acct. Game: Elec, Radio Shack uC,  
     Stores  
 Graziano, Loretta - Robots  
 Creeb, F J - Serial I/O  
 Green, Bill - Game: Chess  
 Green, Charles J - Text Edit  
 Green, Eric R - Analog A/D, I/O  
 Green, J S - Prog: Utility  
 Green, Robert S - F-8 uP  
 Green, W L - Analog A/D  
 Greenbaum, Barbara - Applic. Gen  
 Greenberg, Gary - Hobby. Prog: Applic., Simulation  
 Greene, E M - Lang. Gen., Standards  
 Greene, Ken - Business Acct  
 Greenlaw, Richard - Tiny BASIC, 8080 uP,  
     Prog: Assembler  
 Gregory, J - Fiction  
 Griffin, John E - Mem: PROM  
 Grim, Larry - Displays 7-seg, Keyboard  
 Grimes, Jack - Hobby  
 Grina, James - Mem: PROM  
 Gros, Rick - Lang. Gen.  
 Gross, James - Prog: Fund  
 Gross, Thomas B - Calc Prog  
 Grossman, Avram - Prog: Applic., Prog: Utility  
 Grossman, Morris - Other uC's, Power Supply  
 Grossman, Rick - Game: Chess, Kim uC  
 Grossman, Robert M - uC Select  
 Grothman, Fred - Interface  
 Groves, David N - Education  
 Guji, Akio - Other uC's

Gundlach, Richard - I/O  
 Gunter, Tom - 6800 uP  
 Gutman, Fred - Mem: Test, Plotter, Prog: Applic.,  
     Prog: Structured, Prog: Utility  
 Gyles, Colin - Prog: Applic.

## H

Hackmeister, Dick - Serial I/O  
 Haddox, Joe - Mem: Disks  
 Hadley, Mike - Analog Hard.  
 Hagelberg, Allen C - Business Gen, Simulation  
 Haglund, J R - Printer  
 Hailey, W H - Keyboard  
 Hallen, Rod - Construc, Home, BASIC, Mem: RAM,  
     Mem: Tape, Mem: Test, Music, Prog: Applic.,  
     Prog: Utility  
 Hallmark, Clayton - Test Equip  
 Hallworth, H J - Education  
 Hallworth, H L - Education  
 Halsema, A I - Mem: Disks, Prog: Applic.  
 Hamilton, Dennis - History, Hobby  
 Hamilton, Eric - Math  
 Hancock, Les - Z-80 uP, Prog: Utility  
 Hand, David - Applic. Gen  
 Harding, A J - Game: Computer, Radio Shack uC  
 Hargrave, Roger - Prog: Fund  
 Harr, Robert - Prog: Applic., Video Displ.  
 Harris, Charles J - Amateur Radio  
 Harris, William - Graphics  
 Harrison, Harry - Fiction, History  
 Harrison, Neil - Z-80 uP, Prog: Assembler.  
     Prog: Utility, Video Displ.  
 Hart, Art - Math Problems  
 Hart, Richard - Prog: Utility  
 Hartkopf, Roy - Video Displ.  
 Hastings, Edwin E - Game: Computer  
 Hastings, Susan - Bar Code, Future, Intelligence.  
     Mem: Gen, Robots  
 Hauck, Lane T - Mem: RAM  
 Hayek, Tom - Mem: PROM  
 Hayes, Albert E - Calc Prog  
 Hayes, G D - Experience  
 Hayes, John B - Business Gen, Business Word Process,  
     Text Edit  
 Haygood, William - Intelligence  
 Hearn, Albert D - Prog: Fund, Prog: Structured  
 Heathman, F - Prog: Applic.  
 Heckt, Neil - Keyboard  
 Heesbeen, Ed - Applic. Gen  
 Heinzl, Joachim - Printer  
 Heise, Jan A - Amateur Radio  
 Heiserman, David L - Robots  
 Heisseluft, Prof Emil - Amateur Radio, Biorythm  
 Hellowell, Fred - Game: Computer  
 Helman, Iris - Education  
 Helmers, Carl - Applic. Gen, Books, Future.  
     Gen Interest, Hobby, Lang. Gen., Pascal.  
     Mem: Gen, Apple uC, 6800 uP, Modem, Robots,  
     Text Edit  
 Hemerway, Eileen - BASIC, Other Languages  
 Hemerway, Jack - FORTRAN, Other Languages, Mem: Gen,  
     Mem: Disks, Mem: Tape, uC Des, F-8 uP,  
     Printer, Prog: Fund, Prog: Utility,  
     Serial I/O  
 Hemsath, William - Control, Graphics

Hendren, Dr James K - Business Acct  
 Henely, Robert - Prog: Fund  
 Henkel, Joel - Ohio Sci. uC  
 Henry, John - Printer  
 Henry, Peter - Experience  
 Herff, Anthony P - Mem: Tape  
 Herman, Harvey B - PET uC  
 Hermance, Frank - Analog Hard.  
 Herro, Mark - Game: Computer, Hobby, Home  
 Herstein, Ed - Education  
 Hertzfeld, Andy - BASIC, Apple uC  
 Hesse, Roland - Applic. Gen, Stores  
 Hewart, Brian - Debug, uC Fund  
 Hewitt, Vince - Printer  
 Hewkin, John - Mem: RAM  
 Hiatt, Art - Math Problems  
 Higdon, John M - Heath uC, Terminals  
 Higgins, David A - Prog: Structured  
 Hilburn - uC Des, uP General, Prog: Fund  
 Hill, Garnet L - Analog A/D, Applic. Gen, Control.  
     Education, Other uP's  
 Hills, Sam - Tiny Languages  
 Hilton, Earle - SWTPC uC  
 Hindin, Harvey - Serial I/O  
 Hines, Robert - Plotter, Printer  
 Hirsch, John D - Calc. Selec, Hobby  
 Hnatek, Eugene R - Mem: PROM, Mem: RAM  
 Hoevel, Lee - Game: Computer  
 Hoffer, W C - Clock, Game: Computer  
 Hofheinz, M C - Game: Computer  
 Hogan, K - 6502 uP  
 Holden, Stephen - Prog: Fund  
 Hollen, M - Analog A/D, Other uP's  
 Hollis, Ralph - Robots  
 Holman, Frank S - Digital, Heath uC, 8080 uP  
 Holloien, Martin O - Gen Interest  
 Holt, Rod - Apple uC, Power Supply  
 Hootman, Joe - Analog A/D, Interface  
 Hoover, Robert S - Other uC's  
 Horbst, F - Interface  
 Horton, Glenn - Timeshare  
 Horton, Lyn - Home  
 Horton, Richard L - uC Des  
 Howard, Randall J - Pascal  
 Howell, Jim - Prog: Operating Sys, Timeshare  
 Howell, Ramond - uC Fund, Prog: Applic.  
 Howell, Raymond - Prog: Fund  
 Howland, Chris - Experience  
 Howland, Dave - Interface, Standards  
 Howland, John E - APL  
 Hubatka, Milton C - Other uC's  
 Hubin, W N - Education, Heath uC  
 Huffman, Dave - Mem: RAM  
 Huffman, Jim - Business Word Process, Game: Elec,  
     Interface, Prog: Applic.  
 Hughes, Elizabeth M - Business Gen, Prog: Fund,  
     Stores  
 Hughes, Mike - PET uC  
 Hughes, Phil - Business Gen, Control, Home, I/O,  
     Mem: Disks, SWTPC uC, 6800 uP, SC/MP uP,  
     Prog: Gen, Serial I/O  
 Hughes, Steve A - SWTPC uC, Prog: Fund  
 Hughes, T P - Debug  
 Hughot, Ed - Amateur Radio, Education  
 Hui, Steve - Test Equip  
 Hungerford, Joel C - Graphics, Math

Husbands, Charles R - PET uC, Serial I/O.  
 Test Equip  
 Hutchinson, Thomas E - Elf uC  
 Hutchison, David - Gen Interest. Graphics  
 Hutchison, Perry C - Prog: Operating Sys  
 Hyde, Donald J - Modem. Prog: Applic., Terminals  
 Hyde, Kendall - Math

**I**

Inggs, Michael - Music  
 Irman, Don - Game: Computer, Graphics,  
 Radio Shack uC, Other uC's  
 Irman, Jack A - Game: Computer  
 Irving, Robert - Prog: Fund  
 Isaacson, Portia - Business Gen, Hobby  
 Isard, Phillip - Applic. Gen  
 Ishida, Prof Haruisha - Stores  
 Ittner, William F - Analog A/D, Other uP's

**J**

Jackman, D - Other uC's  
 Jackman, Ken - Math Problems  
 Jacobsen - uC Fund  
 Jacobson, Joe - Art  
 James, John S - Other Languages, Public Access  
 James, K R - Elf uC  
 James, Michael - Construc, Experience.  
 Prog: Structured  
 Janifer, Laurence M - Fiction  
 Jastrow, Robert - Intelligence  
 Jaswa, Rajen - uC Des, Prog: Utility  
 Jaworski, Joe - Game: Computer  
 Jaworski, W B - Video Displ.  
 Jeffery, Donald C - Test Equip  
 Jenkins, Gerald C - Kim uC, Power Supply  
 Jennings, Peter R. - Game: Chess, Gen Interest  
 Jensen, Kathleen - Pascal  
 Jensen, Kris - Game: Elec  
 Jessop, Paul M - Applic. Gen, 6800 uP  
 Johnson, Burt - Other uP's, Prog: Assembler  
 Johnson, David W - Prog: Utility  
 Johnson, David L - Prog: Utility  
 Johnson, Harley D - Mem: PROM, SWTPC uC  
 Johnson, Jim - Other uC's, 8080 uP  
 Johnson, Luther - uC Select  
 Johnson, Robert - Medical  
 Johnston, Bill - Amateur Radio, Business Acct.  
 Calc Prog, Construc, Heath uC  
 Johnston, David W - Calc Prog, Math. Math Problems  
 Jones, B Eugene - Business Acct  
 Jones, Clark - Bar Code  
 Jones, David B - Power Supply  
 Jones, Douglas L - BASIC, Prog: Applic.  
 Jones, James - Graphics, BASIC, Other Languages  
 Joshi, D G - # Base Conv.  
 Juge, Ed - Game: Computer, Radio Shack uC  
 Julich, Paul M - Mem: Disks, uC Des, uP General.  
 Prog: Fund, Prog: Utility  
 Julin, Randall - Video Displ.  
 Jung, Walter C - Clock  
 Jurgenson, Marlinde - Math

**K**

Kagan, Claude A - Other Languages  
 Kahn, Bob - Applic. Gen, Other uC's, Public Access.  
 Simulation  
 Kane - uC Fund  
 Kaplan, Alan - Hobby, Radio Shack uC

Kare, Jordin - Humor  
 Karp, Marilyn - Other Languages, Prog: Structured  
 Karp, Tony - Other Languages, Prog: Fund,  
 Prog: Structured  
 Karshmer, A I - Graphics, History. Intelligence.  
 Robots  
 Karstad, Kaare - Clock  
 Kasser, Joe - Amateur Radio  
 Katz, B Jeffery - 8080 uP  
 Katzen, Harry - Code Conv.  
 Katzire, Robert - Mem: Disks, Mem: Tape  
 Kaufman, Michael S - BASIC  
 Keay, Colin - Game: Computer  
 Keeler, David - Digital  
 Kelanic, Thomas J - Education, Intelligence  
 Kellerman, Eduardo - Art, Graphics, APL  
 Kelton, Robert - Terminals  
 Kent, Ernest W. - Robots  
 Kenton, Jeff - Game: Computer  
 Kernahan, Bill - Education, Speech  
 Kernighan, B W - Other Languages, Prog: Fund,  
 Prog: Structured  
 Kessner, Arthur - Education  
 Ketchum, Don - Music  
 Kewney, Guy - History. Stores  
 Kheriaty, Larry - Education, Lang. Gen., Pilot.  
 Prog: Gen  
 Kiester, Sally Valente - Education  
 Kildall, Gary A - Prog: Utility  
 Kincannon, Victor - Prog: Utility  
 King, Bill - Standards  
 King, D Thomas - Gen Interest  
 Kinnie, Craig - Mem: RAM, Other uC's  
 Kinzer, Don - Debug, Mem: Test. 6800 uP, Prog: Fund  
 Kirschman, Randall - Construc  
 Kitzmiller, James W - Business Gen, Business Acct.  
 Other uC's, Other uP's  
 Kleiman, Art - Future, Prog: Fund  
 Knadle, Charlene Babb - Amateur Radio, Experience  
 Knecht, Ken - Text Edit  
 Knight, Martin - Prog: Utility  
 Knot, Y - Fiction  
 Kobayashi, Terry - uP Select  
 Koening, Andrew - APL  
 Koh, David - Graphics, 6800 uP  
 Kollar, Larry - Game: Calc  
 Kolodzinski, Anthony - Math  
 Kop, Hal - Other uC's  
 Kop, Mike - Timeshare  
 Koster, Robert S - Gen Interest  
 Kraengel, William D - Calc Prog  
 Kramer, Joel A - Mem: Tape  
 Krause, Marina C - Calc. Gen, Education  
 Krechmer, Ken - Modem  
 Kreiger, Allen S - Pilot  
 Kritlow, Bill - Fiction  
 Kroeker, Edwin - Analog A/D  
 Kroening, Mary Elizabeth - Prog: Operating Sys  
 Krouse, Tim - Pascal  
 Kruger, Frederick M - Applic. Gen  
 Kuca, Jay - Construc  
 Kumar, Kalit - 6800 uP, Prog: Utility  
 Kurtz, Robert L - Amateur Radio  
 Kuzmack, Rich - Clubs

**L**

Laengrich, Nobert - Test Equip  
 Laird, Stan - Math Problems  
 Lamb, Sydney - Mem: RAM  
 Lancaster, Don - Graphics, Terminals, Video Displ.  
 Landers, George - Mem: Gen

Lang, C J - Applic. Gen  
 Lang, R B - Applic. Gen  
 Langenes, Bill - Education  
 Langer, Rudy - Mem: PROM, Prog: Gen  
 Lansdown, John - Graphics  
 Lantz, Kim H - Amateur Radio, Kim uC  
 LaPlante, Frederick E - Prog: Fund  
 Lappen, William - Business Gen  
 Larsen, D - Analog Hard., Analog A/D, Clock, Control, I/O, Lang. Gen., BASIC, Math. Mem: RAM, 8080 uP, Prog: Gen, Prog: Fund, Prog: Utility  
 Lasher, Dana - Calc Prog, Debug, Kim uC  
 Lau, Stephen Y - Bit Slice uP  
 Laurino, A James - Mem: Test  
 Law, R M - Text Edit  
 Lawrence, Chester H - uC Select  
 Leasia, John D - Prog: Utility  
 Leavey, Marc I - Mem: Tape  
 Lebeiko, Ken - Prog: Fund  
 Ledder, Wayne - Math, Prog: Fund  
 Lederer, Jeffery H - Music  
 Ledgard, Henry F - Prog: Gen  
 Lee, John D - Education, Game: Computer  
 Lee, Timothy D - Education, Game: Computer  
 Lees, John - uC Fund, Heath uC, Prog: Gen, Prog: Fund  
 Lehman, John A - Code Conv.  
 Leininger, Kenneth D - Amateur Radio  
 Leising, David P - Game: Calc  
 Leleux, Sidney A - Math  
 Lem, Stanislaw - Robots  
 LeMair, Ian - 6800 uP  
 Lemieux, J R A - Calc Prog, Simulation  
 Lemiszki, William - I/O  
 Leonard, Mark - Construc, Digital  
 Lerner, Jackie - Calc. Gen, Math  
 Lesear, Austin - I/O, Interface, Mem: Disks, Power Supply  
 Leslie, John - Debug, Prog: Fund  
 Letwin, Gordon - I/O, Heath uC, uP Select  
 Leventhal, Lance - Education, Lang. Gen., 8080 uP, Prog: Gen, Prog: Fund, Prog: Structured  
 Levine, Bettijane - Gen Interest  
 Levinsky, Jeff - Prog: Operating Sys  
 Levy, David - Game: Chess  
 Levy, Michael - Business Gen, Business Acct  
 Lewis, Barry A - Radio Shack uC  
 Lewis, Larry E - Other Languages  
 Lewis, T G - Applic. Gen, Home, Stores  
 Libes, Sol - Clubs, Debug, Digital. History, Hobby  
 Lien, Dave - Amateur Radio, Mem: Tape, Radio Shack uC, Power Supply  
 Liff, Rita May - Pilot  
 Lillie, Paul A - PET uC  
 Lionel, Steven B - Heath uC  
 Lockhart, Jim - Mem: Test  
 Lockler, L S - Digital  
 Lockwood, M R - Business Acct  
 Loewer, Bob - uC Des, Z-80 uP  
 Lord, Mike - Clubs, Hobby, Other uC's  
 Lott, Johnny W - Education, Math  
 Lowenson, Jeff - Graphics, Video Displ.  
 Luby, Robert M - Business Gen  
 Lufkin, Rob - Applic. Gen, Home  
 Lunt, Karl - Logic

Lutz, Richard J - Fiction  
 Lynch, Jeff - Construc

## M

MacCallum, I R - Prog: Structured  
 MacCluer, C R - Amateur Radio, Calc Prog  
 MacDougall, John - Printer, Prog: Applic., Prog: Utility, Text Edit  
 MacKeen, Jack - uC Select  
 MacLean, Alexander - Analog Hard., Digital. Humor  
 MacLellan, Elliot - Stores  
 MacLennan, Elliot - Business Gen, Gen Interest, Stores  
 Mach, Warner - Gen Interest  
 Maciorowski, Dave - Displays 7-seg  
 Maclean, Dave - uP General  
 Madni, Asad M - Prog: Applic.  
 Maerz, Mike - Mem: RAM, Other uC's  
 Magnusson, Magnus - Hobby, Public Access  
 Mair, Janhe - uP Select  
 Mallon, Marvin - Education, Math  
 Malvino, Albert Paul - Digital  
 Manell, Harrison - Keyboard  
 Mangieri, A A - Mem: Tape, Radio Shack uC  
 Maniotes, John - Math Problems  
 Marateck, Samuel L - BASIC  
 Marathe, A D - I/O  
 Marek, Larry - Mem: Tape, Prog: Utility  
 Margolin, Bob - uC Gen., Test Equip  
 Margulies, Allan S - Math  
 Mark, Bill - Construc  
 Marke, David - Mem: PROM  
 Marr, Jim - 8080 uP, Prog: Fund, Prog: Utility  
 Mars, Dr P - Music  
 Marsh, Barbara - Gen Interest  
 Marsh, Robert - Graphics, Video Displ.  
 Marshall, Robert - Displays 7-seg  
 Marshall, W G - SC/MP uP  
 Martin, Vaughn - Keyboard  
 Matheson, Willard E - Intelligence, Math Problems  
 Matic, Branko - Displays 7-seg, Graphics, Keyboard, Video Displ.  
 Matuschka, Heinz Gf. - Mem: RAM, Mem: Tape  
 Matz, Charles A - Business Gen, Prog: Applic.  
 Matzger, Alan D - Other uC's  
 Maurer, H A - Prog: Gen  
 Maurer, W Douglas - FORTRAN  
 Mazor, Stanley - Prog: Fund  
 Mazzarini, Tony - Modem  
 McArthur, Brian E - Construc  
 McBurnett, Neal - Prog: Utility  
 McCabe, D - Hobby  
 McCaig, Laurence A - Business Gen, Business Acct, Prog: Applic.  
 McCallum, John - Interface, Standards  
 McCann, Michael J - Mem: Test, PET uC, Prog: Assembler  
 McCarty, George - Calc Prog, Math  
 McCarty, Joe - Mem: Tape  
 McClellan, Gary - Digital. Test Equip  
 McClure, James - Amateur Radio, Timeshare  
 McCormick, Bruce - Mem: RAM  
 McCormick, Edward M - Game: Computer, Elf uC  
 McDaniel, Jim - Calc Prog  
 McDermott, Jim - Calc. Selec, Keyboard  
 McGahee, Fr. Thomas - SOL. Prog: Utility

McGath, Gary - Debug, Gen Interest, Humor  
 McGuire, Dennis J - Business Gen, Home  
 McGuire, Ron - Calc Prog  
 McIvor, W - Keyboard  
 McKeeman, William M - Lang. Gen., Prog: Applic.  
 McKeen, Sandi - Robots  
 McLaughlin, Laura L - Education  
 McNair, Bruce - Amateur Radio, Keyboard  
 Meehan, James C - Applic. Gen, Gen Interest  
 Mehner, Ed - Amateur Radio  
 Melsa, L - 8080 uP  
 Mendelsohn, Stephen - Hobby  
 Mennie, Don - Applic. Gen, Hobby, uC Select  
 Merkowitz, Frederick L - Bar Code  
 Merritt, Cal E - PET uC, Video Displ.  
 Merritt, Jim - Pascal  
 Metzler, Edward - Mem: RAM  
 Meyer, Bennett - Ohio Sci. uC, 6502 uP,  
     Prog: Assembler  
 Meyer, Martin - Elf uC, Other uC's  
 Meyers, Norman - Amateur Radio, Communication,  
     Future. Game: Elec, Game: Chess, Lang. Gen.  
 Meyn, John - Video Displ.  
 Michels, Richard E - Business Acct  
 Mick, John - Prog: Gen  
 Mickle - Amateur Radio, Construc  
 Mikes, Peter - Lang. Gen.  
 Mikulski, Pawell - Mem: Tape  
 Milazzo, Charles F - Amateur Radio, Calc Prog  
 Milewski, Richard A - Apple uC  
 Millan, Richard Mac - Education  
 Millen, Jonathon K - Game: Computer  
 Miller, Alan R - Mem: Disks, Mem: Tape, Altair uC,  
     North Star uC, 8080 uP, Prog: Applic.,  
     Prog: Assembler, Prog: Operating Sys,  
     Prog: Utility, Standards, Text Edit,  
     Timeshare  
 Miller, Fred - Mem: Tape  
 Miller, Hampton - uP Select  
 Miller, Jeffery A - Analog A/D, Other uP's  
 Miller, Joel - Control, Home  
 Miller, Merl - Books, Education, History.  
     Intelligence, uC Fund, Robots, Shows, Stores  
 Miller, Morris J - Mem: Disks  
 Miller, William R - Mem: Disks, uC Select  
 Miller-Kirkpatrick, J H - Hobby  
 Millium, Justin - Game: Computer  
 Mims, Forrest M - Analog A/D, Education, Logic,  
     Mem: RAM, uC Des, Prog: Fund  
 Mitchell, Charlie - Mem: RAM, Terminals  
 Mitchell, D C - Power Supply, Text Edit  
 Mitchell, Stuart - SWTPC uC  
 Moberg, Dick - Clubs, Medical  
 Mohan, G R - Mem: RAM  
 Mohd, Maqsood - Mem: Tape  
 Molinari, Fred - Analog A/D  
 Monagan, James - BASIC  
 Montgomery, Richard C - Digital  
 Moody, David B - Game: Computer, Prog: Applic.  
 Moody, Lucille A - Applic. Gen  
 Moore, Al - uP Select  
 Moore, Peter - Mem: Disks  
 Moore, T W - 6800 uP  
 Moore, Tim - Future, Other uC's, Stores  
 Moran, Neal - Stores  
 Morgan, Chris - Mem: Disks, Shows

Morgan, David J - Pilot, Text Edit  
 Morgan, Robert M - Heath uC  
 Mork, Phil - Mem: Gen, Speech  
 Morrill, Harriet - Prog: Applic.  
 Morris, Janet - Education, Math  
 Morrison, Gordon - BASIC, Prog: Applic.  
 Morrison, Robert L - Analog Hard.  
 Morrow, George - Interface, Standards  
 Morse, Stephen P - 8080 uP  
 Morton, Jeffery B - BASIC  
 Moseley, Robin C - Bar Code, I/O, Video Displ.  
 Moser, Carl - Mem: Tape, Mem: Test, 6502 uP,  
     Serial I/O  
 Moss, Dan - uC Des  
 Mougel, Mark - Mem: Disks  
 Hoursund, David - Calc. Gen, Education, Math  
 Mowchanuk, Timothy - Future, Gen Interest,  
     Video Displ.  
 Moyer, William - Calc. Gen  
 Mrazek, Dale - Bit Slice uP  
 Mueller, Robert E - Art, Graphics  
 Muuhonen, Gary - Control, Home  
 Mundie, David A - BASIC, Pascal  
 Munnecke, Tom - Gen Interest, uC Des  
 Murphy, Henry - Prog: Utility  
 Murphy, James L - Game: Computer, Simulation  
 Murrow, Gene - Business Acct  
 Murtha, Stephen - Business Gen, Gen Interest,  
     Stores  
 Musa, Fuad - 6800 uP  
 Musgrove, John - Business Acct, Prog: Applic.,  
     Prog: Utility, Terminals  
 Myron, Elliot - Game: Computer

## N

Naess, Olav - Interface, APL  
 Nagrani, Ashok K - Applic. Gen, Business Gen,  
     Robots, Text Edit  
 Nagurney, Ladimer S - # Base Conv.  
 Neighbors, Michael A - Graphics  
 Nelson, Donald W - Analog Hard.  
 Nelson, Peter - Calc. Selec, Digital, Other uP's  
 Nelson, T U - Analog Hard.  
 Nelson, Ted - Hobby  
 Nelson, Theodor - Art, Books, Graphics, Hobby,  
     Lang. Gen., Prog: Gen, Public Access  
 Nevison, John M - BASIC  
 Newell, Allen - Hobby, Humor  
 Newhouse, Sam - Business Gen, Home, Prog: Applic.,  
     Robots  
 Newman, Steve - Calc Prog, Clock  
 Ngai, Philip - Logic, 6502 uP  
 Nice, H Y - 8080 uP, Prog: Gen, Prog: Fund  
 Nicholas, Karl - Other Languages  
 Nicholson, Robert T - Debug, Prog: Gen  
 Nichparenko, William - Prog: Utility  
 Nicola, V S - Prog: Fund  
 Nievergelt, Jurg - Prog: Fund  
 Nishi, Kazuhiko - Other uC's  
 Nissim, Joseph - Mem: RAM, uC Des  
 Nobis, Robert - 6800 uP  
 Noll, A Michael - I/O, Robots  
 Nonymous, A - Gen Interest  
 Noone, Emeric T - Education, Game: Computer

North, Steve - Bar Code, Game: Computer, APL, BASIC, Pilot, Mem: Disks, uC Select, Apple uC, Heath uC, PET uC, Polymorphic uC, Music, Prog: Utility, Speech  
 Norton, Dr William H - Education  
 Notley, M Garth - Kim uC  
 Noyce, William - Prog: Fund  
 Nurse, Howard L - Heath uC, Printer, Terminals

## O

O'Connor, Mark - Books  
 O'Donnell, John T - Prog: Utility  
 O'Hara, Vicki - Graphics  
 O'Haver, T C - Music  
 O'Haver, Tom - Control, Home  
 O'Loughlin, J - Pascal  
 O'Reilly, Francis J - Kim uC, 6502 uP  
 Ockers, Stan - Kim uC  
 Oels, Howard - Mem: Disks  
 Offen, Dave - Graphics  
 Ogden, Carol A - Construc, Interface, Mem: Gen., Mem: Disks, Mem: PROM, uP Select, 8080 uP, Standards  
 Ogg, Ron - Printer  
 Oglesby, Mac - Education, Game: Calc.  
     Game: Computer, PET uC  
 Oishi, Ken - Mem: RAM  
 Oliphant, James - Mem: RAM  
 Oliver, John P - Applic, Gen  
 Olson, Hank - Control, Home, Power Supply  
 Orossz, Dr Gerald M - Clubs  
 Orr, Joel N - Graphics, Terminals  
 Orr, Ronald N - Public Access  
 Orr, Tom - Game: Chess  
 Osband, Robert - Prog: Applic.  
 Osborn, Gordon - Printer  
 Osborne, Adam - Future, Hobby, Logic, Math, uC Gen., uC Fund, uC Select, uP Select, 6800 uP, 8080 uP, Z-80 uP, Other uP's, Prog: Gen, Serial I/O, Stores  
 Osgood, Skip - Analog Hard.  
 Ostby, Eben - Applic, Gen, Code Conv., Lang, Gen., Other Languages, Prog: Gen, Prog: Assembler  
 Otsuka, William - Displays 7-seg  
 Owen, James G - Calc Prog  
 Owen, Robert P - Calc Prog  
 Owen, Sid - Digital, Keyboard

## P

Pace, Debbie - Control, Home  
 PainKian, Robert A - Clock  
 Palenik, Les - Business Acct, Home, Prog: Applic.  
 Paley, Edward - Debug  
 Pallas, Jim - Art  
 Pallas, Joseph - Cosmac uP  
 Palm, William A - Analog A/D, I/O  
 Palmer, John B - Education, Elf uC, Prog: Fund  
 Palya, William L - uC Select, Other uC's  
 Parker, Robert A - Art  
 Parkinson, Ward - Mem: RAM  
 Parsons, Charles H - Clock, Kim uC  
 Parsons, Keith - Business Gen  
 Parsons, T W - Prog: Fund  
 Pasquino, Anne - Education

Patstone, Walt - Debug  
 Patt, M - Calc Prog, Simulation  
 Patterson, James L - Mem: Disks  
 Patterson, Wes - Prog: Fund  
 Patton, Gerald R - Calc, Selec  
 Paul, Keith - Robots  
 Peak, Mike - Other uC's  
 Pearce, Craig A - Calc, Selec, Heath uC  
 Pease, Robert - Mem: RAM, Power Supply  
 Peckham, Herbert D - Calc, Selec  
 Peele, Howard A - Education, Game: Computer, APL, Math  
 Peeters, D - 6502 uP  
 Peiffer, Erich A - Interface  
 Pelczarski, Mark - Game: Computer  
 Pelt, Dick Van - Mem: Tape  
 Peluso, Anthony - BASIC  
 Penney, George - Gen Interest  
 Penniman, Charles F - History  
 Penny, James B - Video Displ.  
 Penoyer, Robert H - Mem: PROM  
 Pepper, Clement S - Keyboard  
 Percival, Guibert - BASIC, Prog: Fund  
 Perdue, Terry - 6800 uP, Music  
 Perrin, Steve - Game: Computer  
 Persson, N C - Control  
 Peters, Jesse L - Calc Prog  
 Peterson, Craig - Mem: RAM  
 Peterson, Steven J - Math, Prog: Applic.  
 Peuto, Bernard L - Z-80 uP  
 Phadnis, M G - # Base Conv.  
 Phaneuf, Mark - Game: Computer  
 Pickering, Thomas A - Prog: Utility  
 Pielmeier, K P - Prog: Utility  
 Pierce, Craig A - Calc, Selec  
 Pitchford, Charles - Prog: Fund  
 Pittelkau, Clifton W - Amateur Radio, Kim uC  
 Pittet, Rene E - Prog: Utility  
 Pittman, Tom - 6502 uP, 6800 uP, Prog: Fund, Prog: Utility  
 Plauger, P J - Prog: Fund, Prog: Structured  
 Pogue, Rodger - Prog: Applic.  
 Pohlman, William B - 8080 uP  
 Poirot, James L - Education  
 Pokoski, John L - Math, Prog: Applic.  
 Polen, Edward - Power Supply  
 Pollini, Sondra and Steven - Education  
 Pollini, Steve - Analog A/D  
 Pollock, James W - Amateur Radio  
 Poole, Lon - Business Acct, BASIC  
 Poole, Phil - SWTPC uC  
 Porat, Dan I - uC Fund  
 Poray-Tucholski, Dr S J - Gen Interest  
 Posa, John G - Pascal  
 Posdamer, Jeffery L - Graphics  
 Poss, Gary F - Prog: Applic., Video Displ.  
 Powell, Dave - Definitions  
 Powlette, Joseph L - Test Equip  
 Prager, J M - Robots  
 Prazak, Paul - Analog A/D, Calc Prog  
 Prentice, Lloyd R - Experience, Home  
 Prescott, Jon R - Business Acct  
 Prestia, Carmine W - Clubs, Game: Computer, Heath uC, Printer, Prog: Applic.  
 Price, B D - History  
 Price, David - Business Gen  
 Prosenko, Gary J - Z-80 uP  
 Przedpelski, Andrzej B - Calc Prog

Pugh, Tim - Modem. Prog: Applic., Terminals  
 Pumple, Stephen - Mem: PROM  
 Purdin, Titus - Mem: Disks, North Star uC,  
     Prog: Utility  
 Purinton, Timothy - Code Conv., Game: Computer,  
     Humor

## Q

Quasney, James S - Math Problems  
 Quinlivan, F Robert - Mem: RAM  
 Quinn, Chester P - Mem: Disks  
 Quosig, Karl E - PET uC, Power Supply

## R

Rade, Lennart - Calc Prog  
 Raikes, Ron - Business Word Process, Text Edit  
 Rallapalli, Krishna - Mem: RAM, Serial I/O  
 Ramachandran, Gopal - Mem: PROM  
 Ramamoorthy, V - Prog: Applic.  
 Rampelberg, Jerry D - Mem: PROM  
 Randall, James E - Graphics  
 Raphael, Howard - uC Des  
 Raskin, Jef - Lang. Gen., Music, Shows  
 Rasmussen, Cal R - Prog: Utility  
 Ratcliff, David - Printer, Terminals  
 Rawitsch, Dan - Game: Computer  
 Reardon, Judy - Game: Computer  
 Recupero, Andrew A - Game: Computer  
 Reddy, Rema - Mem: PROM  
 Reece, Peter - Applic. Gen, 8080 uP,  
     Prog: Assembler  
 Reed, W B - Printer  
 Rehm, Bradford E - Other uC's  
 Rehnke - Kim uC  
 Rehnke, Eric - Kim uC  
 Reich, L S - Prog: Applic.  
 Reichenbacher, Paul - Construc  
 Reid, Errol D - Calc Prog  
 Reid-Green, Keith S - History  
 Reiland, Robert J - Calc Prog, Game: Calc  
 Reiling, Robert - Clubs  
 Revenel, Bruce - 8080 uP  
 Reynolds, Bob - Other uC's  
 Reynolds, Peter - Definitions  
 Rheinstein, John - Prog: Utility  
 Rice, Jean - Education  
 Richards, Ron - Debug  
 Richards, Thomas - Business Acct  
 Richardson, N - Biorythm  
 Richartz, John - Test Equip  
 Richter, A T - Construc  
 Richter, William - Heath uC, Terminals  
 Rick, Jon A - Graphics  
 Riggs, William - Control  
 Ringer, W V - Future, Intelligence  
 Ripley, Jerald L - BASIC  
 Rippis, David L - Prog: Operating Sys  
 Ritchie, Dennis M - Other Languages  
 Ritter, T Frank - 6800 uP  
 Ritter, Terry - Mem: Test, 6800 uP  
 Robbins, Steve - Game: Computer, BASIC  
 Roberts, Dennis M - Calc. Gen, Math  
 Roberts, Steven K - Prog: Utility, Text Edit  
 Roberts, T P - Plotter  
 Roberts, William L - Prog: Structured

Robertson, J D - Biorythm  
 Rodgers, Robert S - Mem: Gen, 6800 uP  
 Rodman, Richard - Prog: Gen  
 Rodriguez, Suzanne - Education  
 Roehrig, Joe - Applic. Gen, Experience,  
     Game: Computer, Home, Other uC's,  
     Prog: Applic., Simulation  
 Rogers, Bill - BASIC  
 Rogers, Jean B - Calc. Gen  
 Rogers, John F - History, Math  
 Rogers, M S - Digital  
 Rohr, Thomas - Music  
 Roichel, Ancelme - Other Languages  
 Rolander, Thomas - uC Des  
 Ronayne, Thomas N - Game: Computer, Math  
 Rony, P - Analog Hard., Analog A/D, Clock, Control,  
     I/O, Lang. Gen., BASIC, Math. Mem: RAM,  
     8080 uP, Prog: Gen, Prog: Fund,  
     Prog: Utility  
 Rooney, Michael - Lang. Gen., Prog: Gen  
 Rope, John A - Medical  
 Rose, Allen - APL  
 Rosenberg, Ronald - Terminals  
 Rosenbluth, William - Gen Interest. Prog: Gen  
 Rosenstock, Gunter - Printer  
 Rosner, Richard - PET uC, Prog: Fund  
 Ross, Edward - uC Gen.  
 Rossetti, Tony - Robots  
 Rossum, Robert - Robots  
 Roth, Richard - BASIC, Prog: Utility  
 Rovira, Charles A - Mem: Disks  
 Rowe, Mike - Apple uC, Prog: Gen, Prog: Utility  
 Rowe, Neil - Lang. Gen.  
 Rowh, Mark - Fiction  
 Roybal, Phil - Other uP's, Terminals  
 Rozsa, Kalman - uC Des  
 Ruckdeschel, Fred R - BASIC, Math. Serial I/O  
 Rugg, Tom - Game: Computer, Prog: Gen  
 Runyon, Stanley - Printer, Test Equip  
 Ruple, Gary - Graphics, Video Displ.  
 Rush, Peter - Other uP's  
 Rushton, N - Game: Calc  
 Russ, Flora - Game: Computer, BASIC, Prog: Fund  
 Russakoff, Andrew - Game: Computer  
 Rutherford, S L - Plotter, Printer  
 Ryan, Tim - Communication, BASIC

## S

Sabean, Ruth M - Prog: Applic.  
 Sabot, Gary - Construc, Control  
 Sagan, Carl - Future, History. Robots  
 Saleh, Fathi - Mem: Tape  
 Salisbury, Alan B - Prog: Gen, Prog: Structured  
 Salsberg, Art - Prog: Gen  
 Sama, Stephen L - Heath uC, Terminals  
 Sander-Cederlof, Bob - Apple uC  
 Sanderson, Barry - Amateur Radio, Video Displ.  
 Santoni, Andy - Mem: Disks, Mem: RAM, Terminals  
 Santore, Ron - Game: Computer, 8080 uP, Prog: Fund,  
     Prog: Utility  
 Sanyal, S - Mem: Gen  
 Sargent, Peter W - I/O, Altair uC  
 Sauer, A - Interface  
 Saunders, J Lynn - Other Languages  
 Savon, Karl - uC Gen.

Scelbi - 8080 uP  
 Schenk, Robert - Education, Graphics  
 Schenker, Wm J - Applic. Gen, Debug  
 Schildt, Herbert - Applic. Gen  
 Schimpf, James - Clock  
 Schindler, Max J - Lang. Gen., uC Des, uC Select, uP Select, Prog: Gen  
 Schlossberg, Edwin - Game: Calc, Home  
 Schneider, Lee - Game: Computer  
 Schneider, Neil - Displays 7-seg  
 Schochet, Sandor R - Other uC's  
 Schaman, Kenneth E - BASIC  
 Schreiber, Karen - Education  
 Schreiber, Linda M - Education, Game: Computer, Graphics, Home, Music  
 Schreier, Jim - Prog: Gen  
 Schreier, Paul G - Mem: RAM, Mem: Tape, Music  
 Schultz, Debbie - Gen Interest  
 Schumacher, Ernst - Kim uC, Text Edit  
 Schwab, Douglas A - Test Equip  
 Schwartz, Allan M - BASIC, Pascal  
 Schwartz, Art - Logic, Math  
 Schwartz, Irwin - Printer  
 Schwartz, Marc - # Base Conv., Apple uC, Music  
 Schwartz, Milton - Interface  
 Schwartz, Richard A - Calc Prog  
 Schweitzer, Bob - Humor  
 Scott, B A - Game: Computer, Math Problems, Prog: Fund  
 Scott, Douglas E - Biorythm, Calc Prog, Gen Interest, Math  
 Scrupski, Stephen - Other uP's  
 Scully, Tim - Pilot, Medical  
 Seaman, Dennis - Calc. Gen  
 Seawright, James - Control, Graphics  
 Sedacca, Boris - Business Gen  
 Sedlack, B F - Mem: Disks, Mem: Tape  
 Seeds, Glen - Bar Code  
 Sein, Thomas A - Math, Prog: Utility  
 Self, Jerry - Game: Computer  
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